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GROUNDWATER SALINITY AND RESOURCE EVALUATION BY SPONTANEOUS POTENTIAL MEASUREMENTS - EASTERN JEFFERSON AND CARTER COUNTIES, OKLAHOMA

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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

GROUNDWATER SALINITY AND RESOURCE EVALUATION BY SPONTANEOUS POTENTIAL MEASUREMENTS - EASTERN JEFFERSON AND CARTER COUNTIES, OKLAHOMA

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

By

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Norman, Oklahoma

1981

GROUNDWATER SALINITY AND RESOURCE EVALUATION BY SPONTANEOUS POTENTIAL MEASUREMENTS - EASTERN JEFFERSON AND CARTER COUNTIES, OKLAHOMA

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ABSTRACT

The purpose of this study was to determine the volume and distribution of groundwater available for both domestic and industrial uses in Carter and Eastern Jefferson Counties, Oklahoma. Domestic water was defined as water with a TDS of less than 1000 mg/l and industrial water was defined as water with a TDS of between 1000 mg/l and 7000 mg/l. This was accomplished by using spontaneous potential measurements from over 700 oil well logs.

To compute fresh water salinities from spontaneous potentials with the accuracy necessary for this study the existing equations had to be examined and modified. This was achieved by collecting and analyzing empirical data from the study area. It was ascertained that the existing bore hole environmental correction and the Rmfe-Rmf corrections were not sufficient and new equations are presented. The bore hole environmental corrections are greater than predicted by the existing electric analog modeling.

The Rwe-Rw and Rw-TDS relations for the two aquifers in the study area, the Garber Sandstone and the Oscar Group,

were determined and are presented. All these corrections were incorporated into a computer program which computed the salinity of individual formations for over 700 wells.

Four maps were prepared; base of 1000 TDS, base of 7000 TDS, isopach of less than 1000 TDS and isopach of the 1000-7000 TDS water. The isopachs were planimetered and the pore volumes were calculated using density logs for porosities. There are 5.85 x 10^6AcFt of water less than 1000 TDS and 14.02 x 10^6AcFt of water between 1000 and 7000 TDS in the study area.

The hydraulic constants, chemical quality and the pollution potential around each municipality using the groundwater were also determined.

ACKNOWLEDGMENTS

The author wishes to acknowledge and thank his dissertation committee for their advice and help. The committee consisted of Drs. Harp, Menzie, Robertson and Professor Reid. Special thanks are given to the Chair, Dr. Harp, and to Dr. Robertson, who convinced the author to come into the college originally. Special thanks are also given to Jane McConnell who assisted greatly, especially in preparing the illustrations.

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NOMENCLATURE

Term	Units	Meaning
TDS	(mg/l)	Total dissolved solids
MSL	(ft)	Mean sea level
AcFt		Acre feet
Pg		Garber sandstone
Pw		Wellington formation
IPo		Oscar Group
bbl/d		Barrels per day
SP	(millivolts-mV)	Spontaneous potential developed by electrokinetic or electrochemical effects when the borehole mud comes in contact with the formation water
Rw	(Ωm)	True or actual resistivity of the formation water as measured by conductivity cells or computed by the Dunlap method from the chemical analysis
Ec	(mV)	Chemical component of the SP
Ek	(mV)	Electrokinetic component of the SP
Em	(mV)	Membrane potential
E_L	(mV)	Liquid junction potential
Rwe	(Ωm)	Resistivity of the formation water when sodium is the only cation. Rwe=Rw when mg/l Ca++ and Mg++=0
Rmf	(Ωm)	True or actual resistivity of the drilling mud filtrate
Rmfe	(Ωm)	Resistivity of the drilling mud filtrate when sodium is the only cation. Rmfe=Rmf when mg/l $Ca^{++} + Mg^{++} \approx 0$
Rx	(Ωm)	Resistivity of X
Rm	(Ωm)	Resistivity of the drilling mud
ρ	(g/cm^3)	Density
RMF75	(Ωm)	Resistivity of the mud filtrate at 75°F
Tmf	(°F)	Temperature at which the mud filtrate is measured in the logging truck

Term	Units	Meaning
isopach		Contour map with contour lines showing points of equal thickness
S		Storage coefficient of aquifer. Volume of water yielded per unit horizontal area and per unit drop of piezometric surface
T	(GPD/ft)	Transmissivity--hydraulic conductivity x thickness of aquifer
Q	(ft^3/d)	Volumetric flow rate

GROUNDWATER SALINITY AND RESOURCE EVALUATION BY SPONTANEOUS POTENTIAL MEASUREMENTS - EASTERN JEFFERSON AND CARTER COUNTIES, OKLAHOMA

SECTION I

INTRODUCTION

Carter and Eastern Jefferson Counties of southern Oklahoma lie in a geologically complex and heavily oil well drilled area. This study was initiated to characterize the deep groundwater resources of the area. Oil well electric logs provided abundant data used to determine the fresh water resources under highly controlled conditions.

Over 700 well logs were used to build a data base of spontaneous potential measurements, formation thicknesses, formation depths, formation resistivities and bulk densities of all water bearing zones from the surface to a depth where the water contained approximately 10,000 total dissolved solids (TDS). Using equations developed in the study the TDS was computed for each zone. The total reserves and

distribution in map form of water of less than 1,000 TDS and between 1,000 and 7,000 TDS was determined. Base of the fresh water maps were developed for both 1,000 TDS and 7,000 TDS.

The hydraulics of the aquifer, chemical quality and the resources around each municipality using the aquifer were also studied.

The results of this study can be used to locate and determine the amount of water which can be used for drinking, irrigation and industrial purposes.

The methodology and results developed herein can be used by both industry and state agencies for protecting and controlling the use of the groundwater.

SECTION II

GENERAL DISCUSSION

1. Geography

Carter and Jefferson Counties are located in South Central Oklahoma (Figure 1). The study area includes all of Carter County and sections 19-36 of T3S-R4 & 5W, T4S-R4 & 5W and T5S-R4 & 5W of Jefferson County. The topography is gently sloping hills with maximum relief of 350 ft., from 800 ft. MSL to 1150 ft. MSL. The maximum relief is in the northern part of Carter County. The study area contains 115,680 Ac (180 mi^2) in Jefferson County and 535,680 Ac (837 mi^2) in Carter County.

Carter County had a population in 1970 of 37,349 of which 20,881 lived in Ardmore (1).* In Carter County towns using deep groundwater include Ardmore (inactive wells), Ratliff City, Healdton, Wilson, Lone Grove and a rural area near Fox. In Jefferson County the town of Ringling uses groundwater exclusively. Figure 2 shows the towns which

*References are listed at the end.

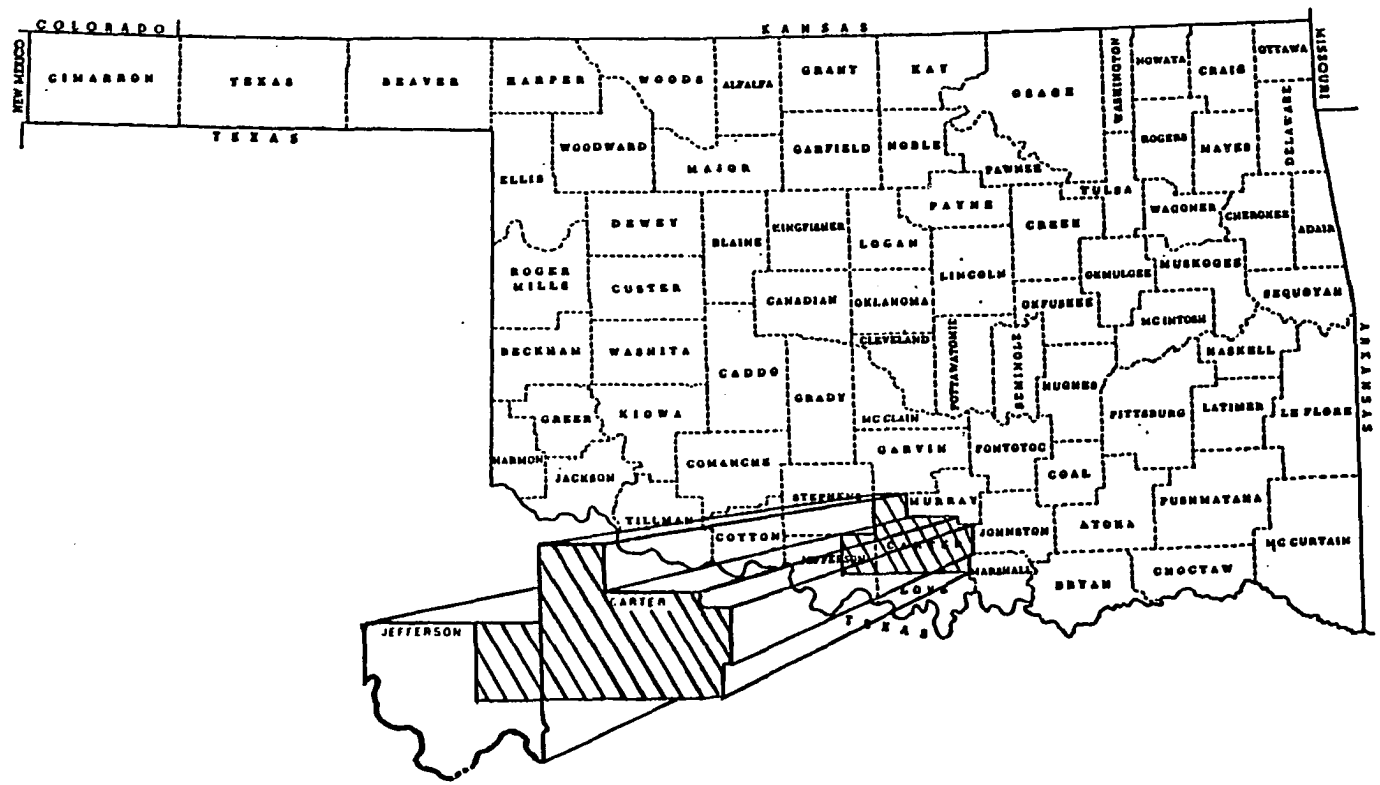


Figure 1. Location of the Study Area

use deep groundwater and the location of the water well fields for the towns.

Water usage records are available through the Water Resources Board from 1966. The breakdown of groundwater usage for Carter County is shown in Table 1. Total groundwater withdrawal from 1966 through 1978 (excluding 1977) was 15,000 AcFt. (2) Groundwater use in the Jefferson County part of the study area is primarily by the town of Ringling. Ringling presently uses on the average 336 AcFt/yr. or 68% of the groundwater used in Jefferson County in 1978 (3). Using this percentage of the total county water usage since 1966 (excluding 1977) then 2150 AcFt of water have been withdrawn from the Ringling area. The total groundwater withdrawn from the study area since 1966 (excluding 1977) is then 17,150 AcFt or 1430 AcFt/yr.

Groundwater usage in the near future will probably not change significantly. Healdton is now using mostly surface water and Ratliff City will probably do so. This decline will be offset by a greater use of fresh water in enhanced oil recovery. The state agencies are in the process of formulating policies concerning this water usage now. Industrial use of potable or irrigation water may be restricted in the future.

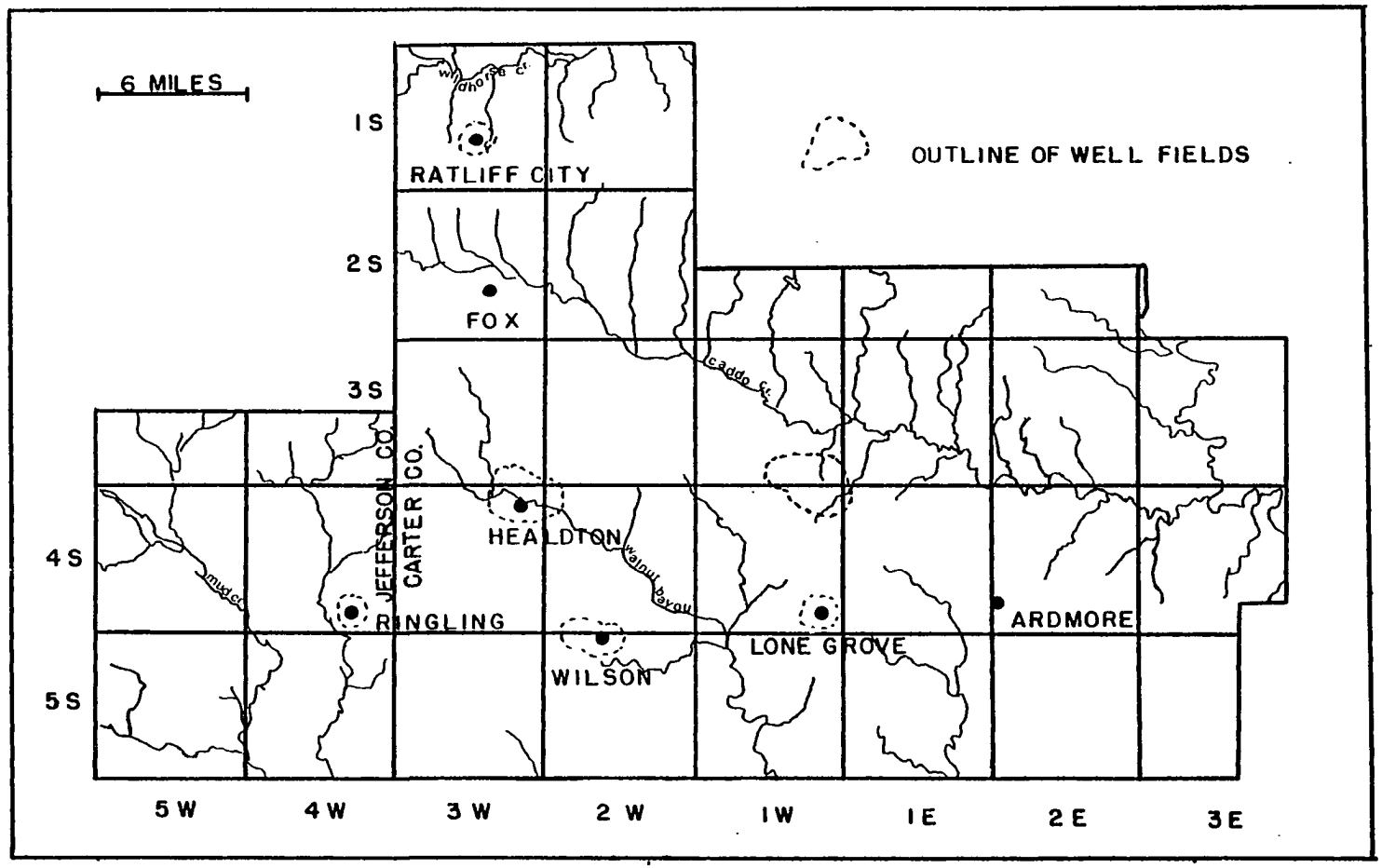


Figure 2. Major Creeks of the Study Area

TABLE 1

WATER USAGE IN CARTER COUNTY (AcFt.)

Year	Crop	Municipal	Secondary Oil Recovery	Other	Total
1966	2	0	0	0	2
1967	113	101	0	0	214
1968	0	33	0	0	33
1969	183	18	0	5	206
1970	1301	279	0	0	1580
1971	573	1399	0	0	1972
1972	614	438	0	0	1052
1973	1081	84	48	0	1213
1974	769	79	477	0	1325
1975	485	621	1061	0	2167
1976	775	746	465	0	1986
1977	145	838	15,061*	0	16,044*
1978	2044	552	660	0	3256

*These numbers are probably in error.

2. Climate and Runoff

The study area has a mild climate with moderate precipitation. The average temperature is 63.5°F (4) with the maximum average temperature of 90°F occurring in July. The minimum average temperature of 31°F occurs in January. The precipitation averages 35 inches, most of which occurs in spring. From May to November the average lake evaporation is 59 inches over the area. The wind averages 12 MPH over the year and is predominantly from the south. An average year will have 148 clear days, 93 partly cloudy days, 124 cloudy days, 3000 hours of sunshine and a relative humidity of 80% at 6 AM to 53% at 6 PM. Average daily solar radiation is 255 Langleys in January to 600 Langleys in July.

The major creeks are identified on Figure 2. In Carter County Caddo Creek, Walnut Bayou and Wildhorse Creek drain the surface. Mud Creek is located in the Jefferson County part of the area. The U.S.G.S. has two water quality stations, one on Walnut Bayou and one on Mud Creek. Mud Creek is also a gaging station.

The Mud Creek station is in the NW/4 SE/4 section 25-T6S-R4W Jefferson County. The basin drains an area of 572 mi^2 (5). The average discharge for 17 years is 83,320 AcFt/yr or 7.8% of the basin precipitation. The other water quality station is at Walnut Bayou in the NW/4 SE/4 section 21-T7S-R1W Love County, Oklahoma (6). The analyses from

these stations for 1977 are shown in Table 2.

3. Geology

The regional geology of the study area is very complex and is heavily folded and faulted. The northern part of Carter County is just west of the Arbuckle Mountains and the Ardmore Basin crosses the eastern end of Carter County from NW to SE.

The major fresh water reservoirs are found in the Permian and Pennsylvanian age sandstones. The Pennsylvanian Oscar Group (as named by the Oklahoma Geological Survey) is the main aquifer of the area. Oscar is the surface name which is equivalent to the Pontotoc of the subsurface. Pontotoc is the common field name used by oil operators in Southern Oklahoma.

The Oklahoma Geological Survey uses the following sequence of rocks:

Surface	
Permian	Garber Sandstone (Pg) Wellington Formation (Pw)
Pennsylvanian	Oscar Group (IPo) (Pontotoc in subsurface)

The name Oscar or Oscar Group will be used in this study for both the surface and subsurface. The distinction between Garber-Wellington and the Oscar is important as the

TABLE 2

AVERAGE ANNUAL SURFACE WATER CHEMICAL ANALYSES

Mud Creek - NW SE 25-6S-4W, Jefferson County

DO mg/l	Temp °C	pH	Cond @ 25°C µmhos	Turbidity JTU	TDS mg/l	Total Hardness mg/l $CaCO_3$	CL mg/l	SO_4 mg/l	F mg/l	Total Kjeln mg/l	COD mg/l	Tot Phos mg/l
8.0	11.5	7.7	895.6	100.7	568.4	256.1	164.5	59.0	0.3	1.9	38.2	0.24

Na mg/l	K mg/l	Ca mg/l	Mg mg/l	CD µg/l	NI µg/l	AG µg/l	CR µg/l	CU µg/l	Pb µg/l	Zn µg/l	As µg/l	Se µg/l	Hg µg/l
98.0	6.9	50.6	32.4	1.4	13.3	3.7	17.3	12.0	18.7	33.3	2.7	1.0	0.5

Walnut Bayou - NW NE 21-7S-1W, Love County

DO mg/l	Temp °C	pH	Cond @ 25°C mhos	Turbidity JTU	TDS mg/l	Total Hardness mg/l $CaCO_3$	CL mg/l	SO_4 mg/l	F mg/l	Total Kjeln mg/l	COD mg/l	Tot Phos mg/l
10.4	11.6	9.0	1296.9	43.5	843.4	340.5	267.9	74.6	0.3	1.7	30.3	0.19

Na mg/l	K mg/l	Ca mg/l	Mg mg/l	CD µg/l	NI µg/l	Ag µg/l	CR µg/l	CU µg/l	Pb µg/l	Zn µg/l	As µg/l	Se µg/l	Hg µg/l
147.8	5.4	78.2	28.4	1.7	12.7	2.2	25.3	10.0	18.3	20.0	2.3	1.0	0.7

water chemsitry is quite different and this difference is reflected in the well log measurements.

The Oscar Group is a reddish-brown to gray shale with porous and permeable sandstone members. The group averages 300-500 feet thick. Sandstones contain purplish maroon shale with barite concretions, are cross-bedded, very friable, and fall apart on weathering to develop pasture. The lower portion thickens into massive cherty sandstone basinward. The group frequently contains low gravity oil and natural gas in structurally high areas. (7)

The Garber-Wellington is a reddish-brown shale and sandstone sequence with fine to coarse grained sandstone 110-150 feet thick. The basal part contains a bituminous gray sandstone. The lower contact is unconformal and frequently contains asphalt over oil fields. Garber favors Black-Jack oaks. (8)

The entire section varies from a few hundred feet thick at the Healdton Oil Field (4S-3W) to over 1300 feet thick in the Wildcat Jim Oil Field (2S-2W).

Soils in the study area are of three main types; 1) those on stream beds (Pulaski-Bunyon-Bergstrom), 2) those on flood plains (Windhorst-Weatherford-Darnel), 3) those on the divide areas (Weatherford-Windhorst). The three types have the following properties. (9)

Type 1)	Name	Hydraulic Conductivity
	Pulaski	2-6 in/hr
	Bunyon	0.6 -2 in/hr
	Bergstrom	0.6 -2 in/hr
Type 2)	Name	Hydraulic Conductivity
	Windhorst	0.2-0.6 in/hr
	Weatherford	0.6-2 in/hr
	Darnell	2-6 in/hr
Type 3)	Name	Hydraulic Conductivity
	Weatherford	0.6-2 in/hr
	Windhorst	0.2-0.6 in/hr

4. Outcrop and Recharge

Outcrop areas of the Garber formation and Oscar Group are shown on Figure 3, taken from the latest geologic map available. (10) The outcrop area for the Oscar was measured by the author from the same map. 118.9 mi^2 of Oscar outcrop area are present in Carter County and 64.8 mi^2 in Jefferson for a total of 183.7 mi^2 for the study area. The Oscar Group averages about 25% permeable reservoir rock at the outcrop, the rest being shale and siltstone. This figure was determined from well logs in the outcrop area. Thus, ignoring dip angle, approximately 46 mi^2 or 29.400 Ac. of reservoir rock outcrops in the study area.

Exact methods of calculating recharge require more

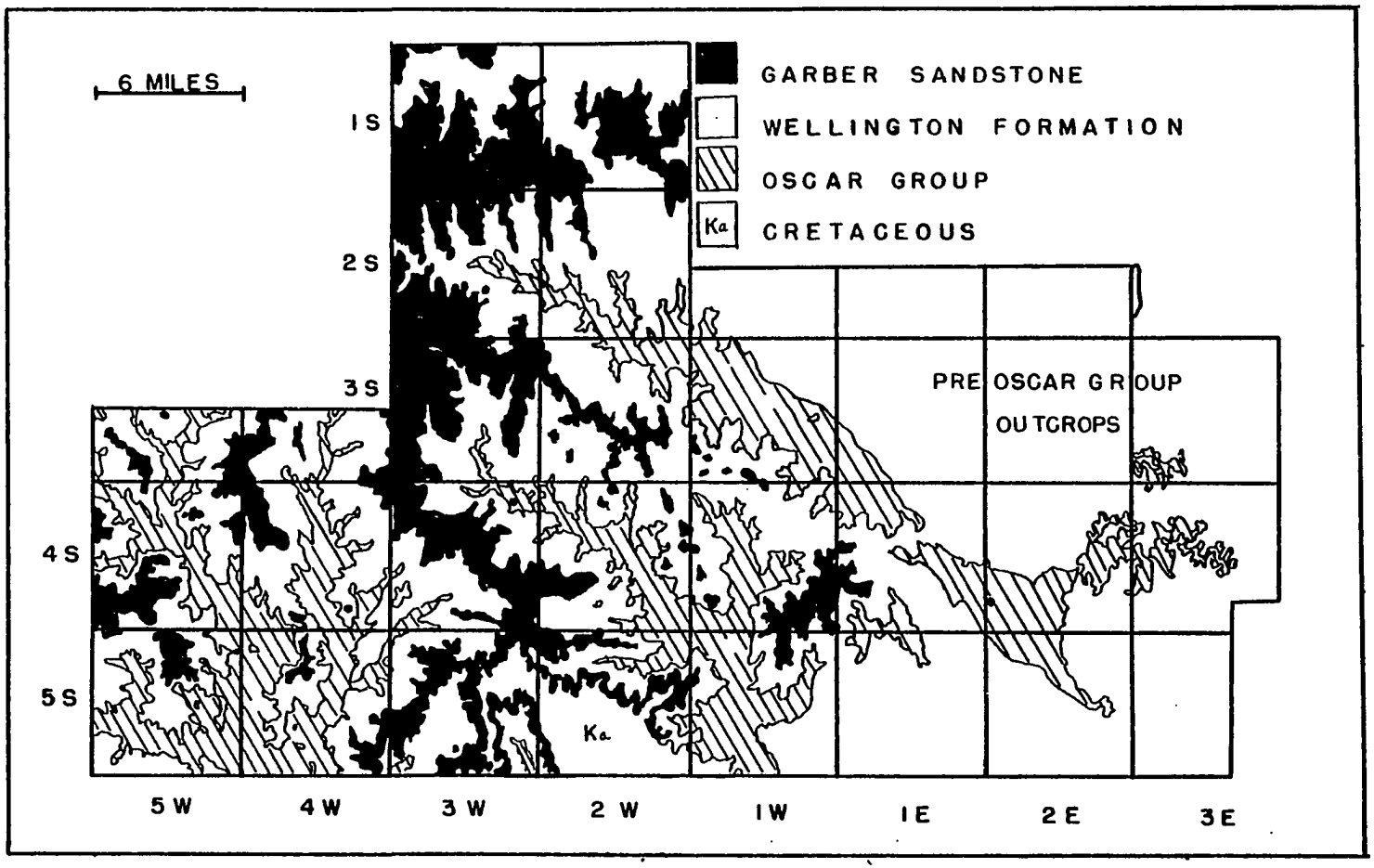


Figure 3. Outcrop Patterns of the Study Area

data than was available in this study. Recharge can be found by a budget approach such as equating:

$$Pg = Rg + ETg + U \pm \Delta Sg \quad (11)$$

where: Pg = groundwater recharge

Rg = groundwater runoff

ETg = groundwater evapotranspiration

U = subsurface underflow

ΔSg = change in groundwater storage

Of these terms only Rg and U can be determined with any degree of accuracy.

The recharge can be estimated by knowing that pumping over the last ten years has not caused significant drawdown problems in any part of the area. Thus the recharge can be roughly equated to the amount withdrawn by pumping. The average withdrawal per year since 1970 is 2325 AcFt/yr. With a recharge area of 29,400 Ac. the recharge is $\approx$1 inch/yr. or about 3% of the annual precipitation. This is probably at or better than safe yield. This compares favorably with several estimates of other aquifers around the country of 18%, 5%, 6%, 6.5%, 3% and 2% of the annual precipitation (12). Five percent of the annual precipitation was reported for recharge of the Garber-Wellington of Cleveland and Oklahoma Counties. (13) A reasonable value for the safe yield of the Oscar aquifer would be 4% to 5% of annual precipitation or 3430 AcFt to 4280 AcFt.

5. Historical Development of Industrial Impacts and Water Use

Carter County is one of the oldest and most heavily drilled oil and gas producing areas in the state. The industry has had and will have a major impact on the water resources. In the past the industry has been responsible for pollution of the aquifer and in the future the industry will be exerting an increasing demand for fresh water for enhanced recovery operations. Both of these aspects will be discussed by using an historical development.

The first drilling occurred at Healdton in the late 1800's which was soon followed by oil discoveries in 1907 and 1915 at the Wheeler oil field and Fox respectively. Oil development increased very rapidly due to low drilling costs. By 1914 storage had become a major problem, and an estimated 150,000 barrels of oil were washed away by rain during this era. (14) As drilling increased to the flanks of the oil producing structures saltwater production increased and became a problem. Before 1900 there was no control and saltwater was discharged into the creeks. (15) As towns grew and surface water was needed the problem came to be noticed. The first control in the early 1900's was the use of evaporation ponds. These ponds worked very poorly due to heavy rains, small surface areas, cloudy days and little evaporation during winter months. In the East Texas pool in Texas this problem became acute. The ponds

were called "hope to God pits" meaning that the operators hoped the dams would burst and wash away the salt water. (16)

As the volume of saltwater increased states began to pass laws restricting the surface disposal of salt water and salt water disposal wells became popular in the late 1930's. This method caught on fast and is the only method used now.

Disposal well technology improved over the years with a major change occurring in 1972 when Oklahoma required that tubing and packer be used inside of the casing. This could virtually eliminate casing leaks since the annulus pressure can be checked by the state. The present laws of Oklahoma, if properly adhered to, could be completely effective in protecting fresh water.

The polluting effect of surface disposal of saltwater is difficult to identify with accuracy since before the late 1940's electric logs were not used. There exists virtually no written documentation of the state of the groundwater before this time. There are areas where considerable saltwater pollution exists, one of which will be discussed later in this study.

In discussing the history of the Healdton Oil Field Ruth Knowles describes a conversation between a farmer and one of the first oil operators, Wirt Franklin, as follows: "Now, it's /the groundwater/ got tar in it, but it's real healthy drinking water" . . . "it ain't hurt us none." The tar was strained out through cheesecloth. (17) The water

in this area is undrinkable now. The location of the major oil fields near the Oscar outcrop is shown on Figure 4.

In 1963 3.75×10^6 bbl/d of saltwater were produced in Oklahoma of which 3.16×10^6 bbl/d were injected for water floods and 583,000 bbl/d were injected in disposal wells. 5370 bbl/d were kept in impervious pits and 2685 bbl/d were kept in lined pits. (18)

By 1976 there were 3265 wells in Carter County which produced 16.1×10^6 bbls of oil. In the same year 1195 wells were used to inject 305×10^6 bbls of salt water. Thus the ratio of 1976 injected water to produced oil was:

$$\frac{76 \text{ injected water (bbl)}}{76 \text{ produced oil (bbl)}} = \frac{305 \times 10^6 \text{ bbl water}}{16.1 \times 10^6 \text{ bbl oil}} = 19/1$$

The cumulative ratio was estimated to be 10.7/1 or a total of 2.34×10^9 bbls of water injected in Carter County. (19)

In Oklahoma the Corporation Commission is responsible for enforcement of fresh water protection laws when oil or gas operations are involved. The rules have become more precise and restrictive over the years. For example in 1946 the references to fresh water protection are listed below.

> "206(a) Surface Casing Requirements and Cementing for Proper Anchorage
>
> . . ., sufficient surface casing shall be run to reach a depth below all domestic fresh water levels, . . ." (20)
>
> "502 Casing and Cementing of Injection Wells-Wells used for injection of gas, air, or water into the producing formations shall be cased with safe and

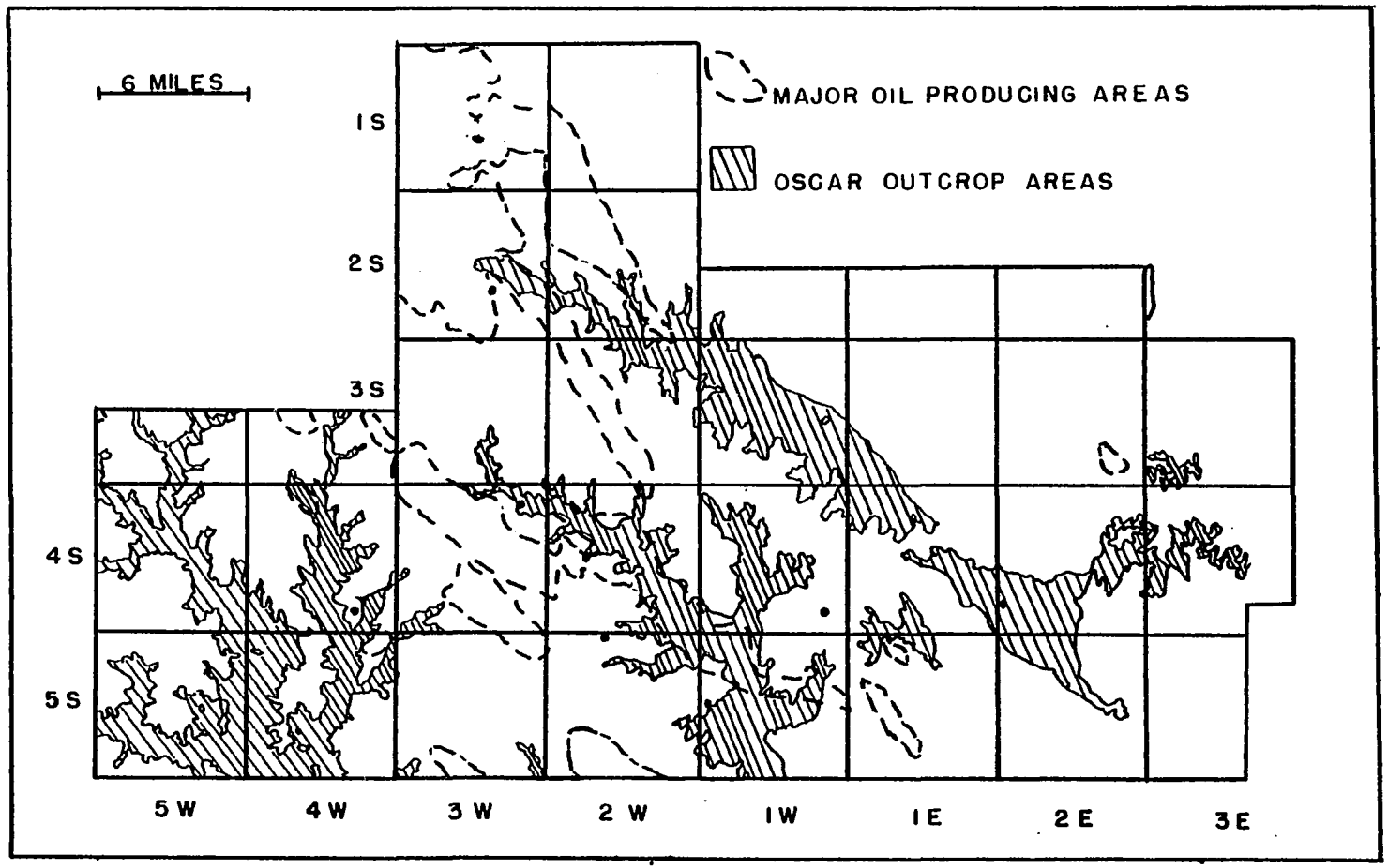


Figure 4. Major Oil Producing Areas of the Study Area

adequate casing, or tubing so as to prevent leakage, and shall be so set or cemented that damage will not be caused to oil, gas, or fresh water resources."

"505 Underground Disposal of Water
. . . Disposal wells shall be cased and the casing cemented in such a manner that damage will not be caused to oil, gas, fresh water, or other resources."

The 1978 rules define fresh water as;

". . . surface and subsurface water in its natural state, useful for domestic livestock, irrigation, industrial, municipal and recreational purposes and which will support aquatic life, and containing less than 3,000 PPM TDS" (21)

The present 1980 rules referring to fresh water protection are listed below. (22)

"3-110 Use of Earthen Pits
. . . shall be constructed of, or sealed with, an impervious material so as to prevent any escape of any deleterious substance.

3-112 Injection and Disposal Wells
(c) Injection or disposal of water or any substance shall be through adequate tubing and packer . . . .
(d) The casing outside the tubing shall be tested . . . .

3-114 Protection of Municipal Water Supplies
The Commission upon application of any municipality or other governmental subdivision, may enter an order establishing special field rules within a defined area to protect and preserve fresh water and fresh water supplies.

3-206 Drilling and Casing Procedures
(b) Suitable and sufficient surface casing or a stage collar shall be installed to a depth of at least 50 feet below the surface or a depth of 50 feet below all fresh water strata encountered in the well, whichever is deeper, and the annular space behind the casing shall be filled with cement from the base of the surface casing, or from the stage collar, to the surface of the ground by either the pump and plug method or by the displacement method. . . ."

The 1980 rules define fresh water as;

> "Fresh water shall mean surface and subsurface water in its natural state, useful for domestic livestock, irrigation, industrial, municipal and recreational purposes and which will support aquatic life, and contains less than 7000 ppm total dissolved solids or less than 3500 ppm chlorides."

One major result of this study was to map the base of the fresh water as defined above in a controlled quantitative manner so that surface casing might be set at the proper depth.

Another major result of this study was to determine, quantitatively, the amount of water available for enhanced recovery projects. This water was defined as that water between 1000 TDS and 7000 TDS. One thousand TDS was chosen so that potable water would not be used for this purpose. Seven thousand TDS was chosen for reasons as follows.

In enhanced oil recovery operations, for example in micellar floods, a series of different fluids are injected in slugs into the oil reservoir. The first may be fresh or brackish water as a preflush to adjust the salinity and lower the divalent ions. Then a small slug of the micellar fluid is injected as the cost of this material is very high. Finally fresh water-polymer solution is injected for mobility control. This step may use a large quantity of fresh water and has become controversial in Oklahoma recently. Once this water has been mixed and injected it is unusable for domestic purposes.

Mobility (λ) is defined as;

$$\lambda = k\ kr/\mu$$

where: k = absolute permeability

kr = relative permeability

μ = viscosity

At a flood front when;

$$\frac{kr_1/\mu_1}{kr_2/\mu_2} = M \leq 1$$

where : 1 = displacing fluid

2 = displaced fluid

a sharp (thus ideal) interface is developed allowing maximum sweep efficiency. Adding a polymer increases μ_1, thus lowering M. (23)

Polymers are long chain molecules and are of several types. Polyacrylamides are the polymers most used today. They are widely accepted and have the greatest history of use. They are also less expensive and quite sensitive to salinity. (24) Polysaccharides are less sensitive to water salinity but are more expensive and tested less. Nonionic polyacrylamides are compatible with a wide range of brines but are rarely used in enhanced recovery work.

Polyacrylamides must be mixed with fresh water since the magnitude of mobility ratio improvement decreases with water salinity and divalent ion concentration. Just how fresh is necessary is still being debated. Various sources use figures of <5000 TDS to <50,000 TDS (25) and <10,000 TDS. (26) The viscosity and chain length dependence on

NaCl concentration for Pusher®, a hydrolyzed polyacrylamide was recently investigated and is given below. (27)

NaCl Conc. (PPM)	Intrinsic Viscosity	Size (Å)
200	9.9	2950
1000	7.18	2650
10000	6.42	2550

Given this data and the high cost of the chemicals, enhanced oil recovery operators will minimize the risk by using very fresh water. For this reason the author chose a lower salinity limit of 7000 TDS as a realistic cutoff for computing the groundwater reserves available for this purpose.

6. Previous Investigations

Two studies which deal directly with groundwater in the study area are published by the Oklahoma Geological Survey: 1) Base of the Fresh Groundwater in Southern Oklahoma - U.S. Geological Survey Hydrological Investigation Atlas HA-223, 2) Reconnaissance of the Water Resources of the Ardmore and Sherman Quadrangles, Southern Oklahoma: U.S. Geological Survey Hydrological Atlas 3. Both are map packets by Donald L. Hart Jr. with the U.S. Geological Survey and are regional in nature.

SECTION III

THEORETICAL ASPECTS OF THE SP

1. Qualitative Description of Well Logs

To map the distribution and thickness of zones with <1000 TDS and 1000-7000 TDS much more control was necessary than the 20-30 wells with analyses in the fresh water. Under highly controlled conditions over 700 well logs were used to compute TDS of the individual sandstone beds over the study area.

Well logs, in particular the spontaneous potential measurements from the logs, have long been used in the oil business both to compute formation water resistivity of saline beds and as a qualitative guide in finding the base of the fresh water for setting surface casing. They have been used much less successfully in Oklahoma to compute formation water resistivity (Rw) of fresh water zones. In the past the error using published equations has frequently been quite large. It was necessary to determine the source of the error and correct it so that reliable data could be obtained.

Figure 5 is the heading and a few hundred feet of log for a well in Carter County. Since the oil boom in Southern Oklahoma occurred in the early 50's the great majority of logs are from this period of time. Thus the maps developed describing the aquifer actually depict it as it was in the mid 50's. Newer logs were used where available. The bulk densities used to compute the porosity of the Oscar are all from newer logs. Data from the log heading was used for the quantitative analysis and will be described later in that section. The left part of the log contains the spontaneous potential curve. This curve is the basis for the TDS calculations and the theory will be covered in detail. The right side of the log contains the formation resistivity curves. The center portion contains the depth of the log. Most of the 1950 type logs of Carter County are either of the induction type or the older electrical survey type. The theory and interpretation of these curves will not be discussed here as they are covered in great detail in other places (28) and are used only in a limited way in this study. When an electric survey log was run the deep resistivity of the formation was taken from the 19 foot lateral curve and the shallow resistivity was taken from the 16 inch short normal. When an induction log was run the deep induction curve was used as the deep resistivity and the 16 inch normal or the Laterlog 8 was used as the shallow resistivity. Enough medium induction log curves were available to know that due

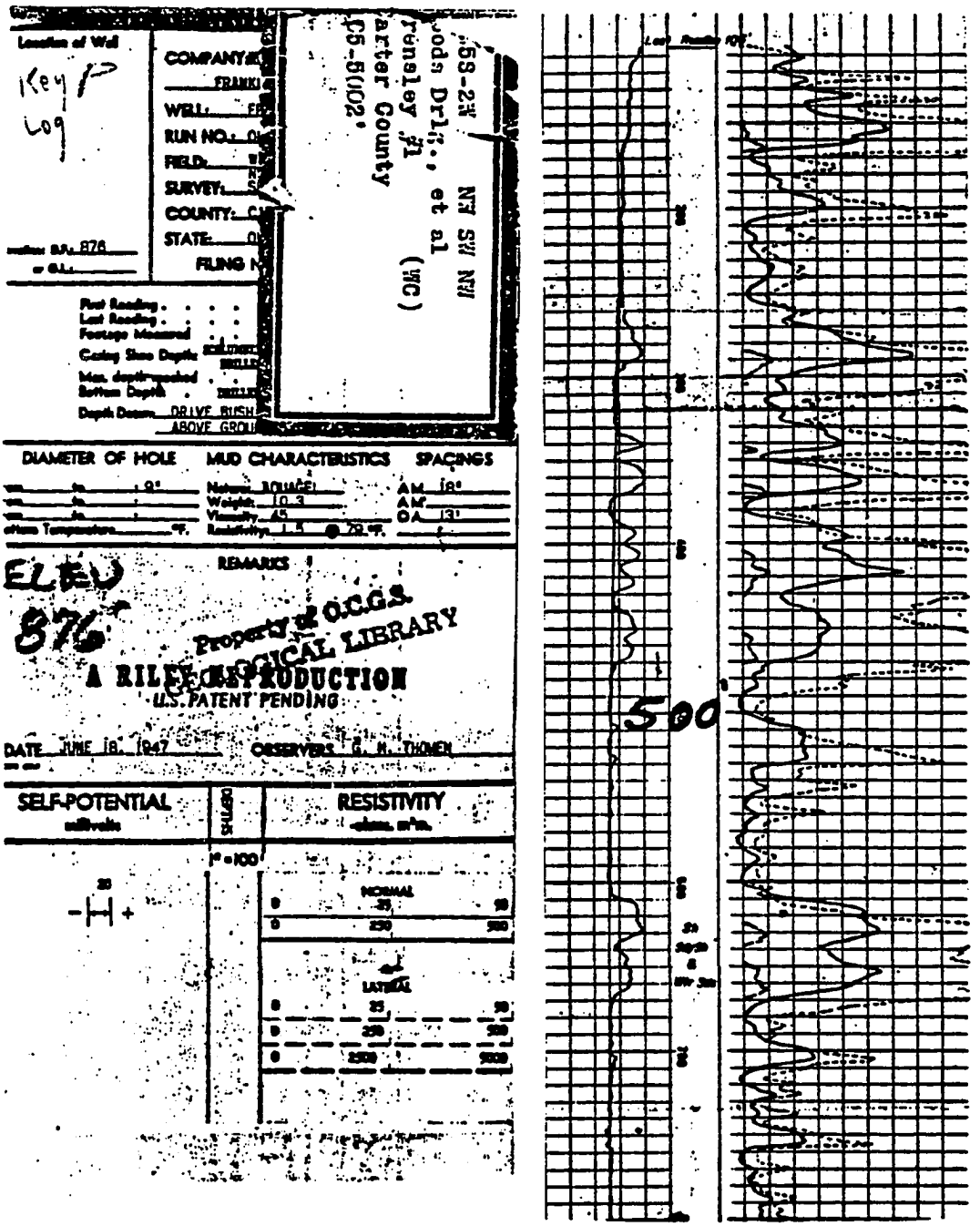


Figure 5. Heading and Fresh Water Section of a Well Log

to the high porosity of the Oscar there is very little mud filtrate invasion, and invasion corrections for the deep induction were not necessary.

The spontaneous potential (SP) curve heading is in millivolts with negative to the left and positive to the right. Most logs have 20 mv scalings. In general the shales have resistivities of about 5 ohms and no SP deflections since they are essentially impermeable whereas the sandstones are either more or less resistive than the shales and have either positive or negative SP deflections. Fresh water is identified by positive SP deflections and resistive beds. SP's of +20 mv or greater usually represent potable water in the study area. SP's of +5 to -5 with moderate resistivities usually indicate poor to brackish water in this area. SP's more negative than -30 mv with resistivities less than the shale are saline (>10,000 TDS).

In Carter County on old oil fields one must use caution in this qualitative approach. Frequently the shallow beds contain low gravity oil and will be more resistive with a lower (more negative) SP than expected, even though the water may be quite fresh. One must also use caution when the resistivity of the mud is very high or low (>3 or <1). This qualitative approach was used by the U.S.G.S. to develop Hydrological Investigation Atlas HA-223, mentioned in the previous investigations.

To use the logs to compute TDS the theory of the

origin of the SP curve must be understood.

2. Measurement of the Spontaneous Potential in the Well Bore

Figure 6, taken from M.R.J. Wyllie (29) is a schematic of the SP logging system. An electrode is raised up the borehole with a second electrode in the mud pit or some other earth contact. The recording galvanometer records the potential difference between the two electrodes.

3. Origin of the Spontaneous Potential

The origin of the SP has been covered in detail by many authors. (30) It will be covered here only in enough detail to set the background needed in the study.

The electromotive force causing the SP current comes from two different sources and the total SP has accordingly two components: a chemical component (Ec) and an electrokinetic effect (Ek). Thus SP = Ec + Ek.

The electrokinetic (or streaming) potential is developed across low permeability zones when fluid is forced through the zone by a pressure differential. Since wells are drilled with the hydrostatic pressure greater than the rock pressure this positive pressure differential is always present. The potential develops when charged layers develop on the liquid and solid face. As the fluid moves into the zone it carries the charged layer and the flow of charge is

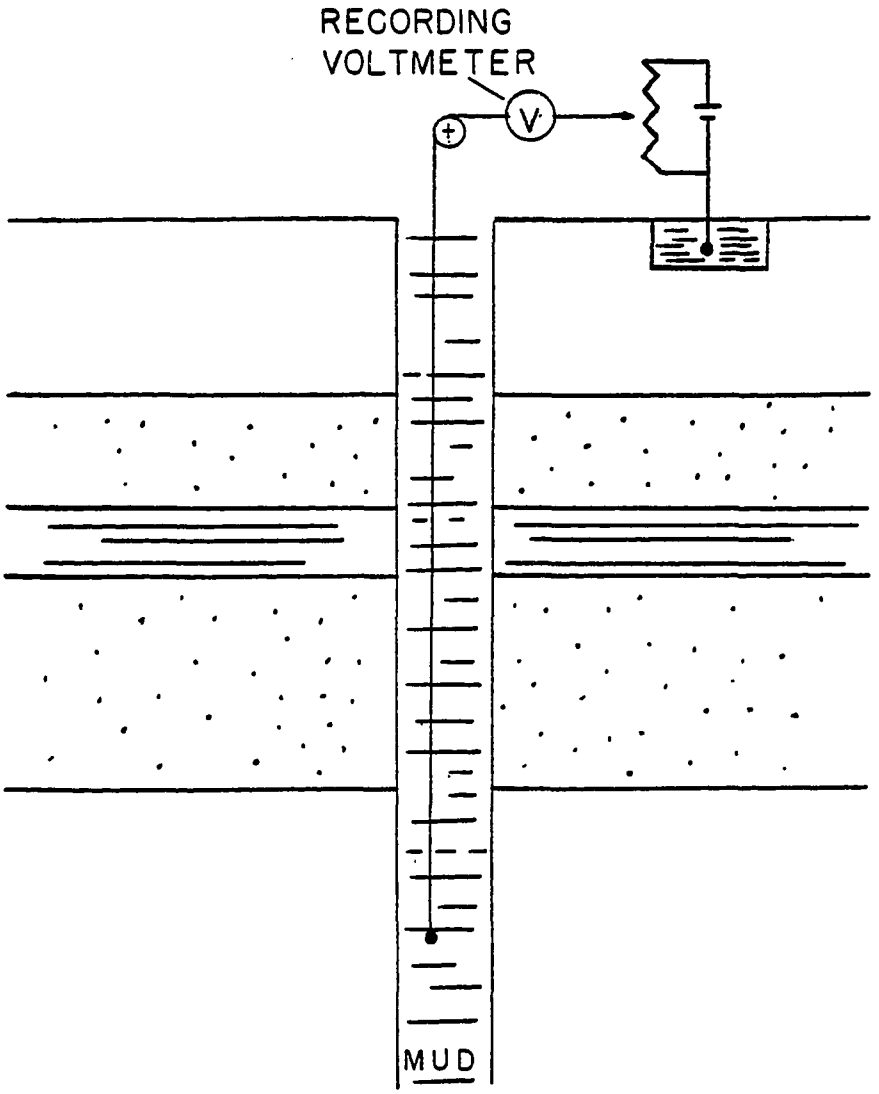


Figure 6. Schematic of the SP Logging System
(After Wyllie)

an electric current. Collins (31) presents an equation for the potential by combining the zeta potential with Darcey's law:

$$V(\text{potential}) = \frac{q\ d\ \phi\ \mu\ L}{C E_o\ k\ \zeta\ D\ A}$$

where: q = flow rate

d = distance between charged layers

ϕ = porosity

μ = viscosity

L = layer thickness

C = constant (L^{-1}) characteristic of the material

E_o = 8.85×10^{-12} coulombs^2/N-m^2

k = intrinsic permeability

ζ = zeta potential

D = dielectric constant

A = area

Since a mud cake develops on porous formation faces in rotary drilling and the permeability in the cake may be 10^4 times lower than in the formation, nearly 99% of the pressure drop is across the mud cake. (32) Accordingly the streaming potential develops at the mud cake. It is now believed that a streaming potential develops in the shales also, so that the SP in the shale equals the SP from the formation and the streaming potential thus exists at the formation but is not seen on the recorded curve. (33) Because of this effect and the low hydrostatic pressure in the shallow sandstones the author has taken the electrokinetic

potential (Ek) equal to zero.

With Ek = 0 then the SP = Ec and the entire potential is due to electrochemical effects. Figure 7 shows a fresh water ($\approx$700 TDS) Oscar sandstone which has been penetrated by the drill. The SP which would develop across the zone if the resistivity of the mud filtrate was near 1.8 ohms is shown next to it. The dashes represent shale and the dotted zone sandstone. The denser area of dots is the invaded zone. In this study the invaded zone is nearly nonexistent due to the high porosity of the Oscar sandstones. High porosity assures that a thick mud cake is developed very quickly. With a TDS of 700 the resistivity of the formation water is greater than 10 ohms. Since the mud is a more concentrated salt solution than the formation water, two separate and distinct reactions tending towards equilibrium develop. Referring to the figure, ions migrate across the liquid/solid (arrow 1) face of the shale (membrane potential) but the negatively charged clays of the shale allow only cations to pass so that a negative charge develops on the face of the shale.

At the mud filtrate/formation water face (liquid junction potential) the ions are also migrating toward the more dilute formation water (arrow 2), but in this case the Cl^- mobility is much higher than the other ions and a positive charge is developed in the mud. Thus the SP appears as + excursions from the shale base line, the potential

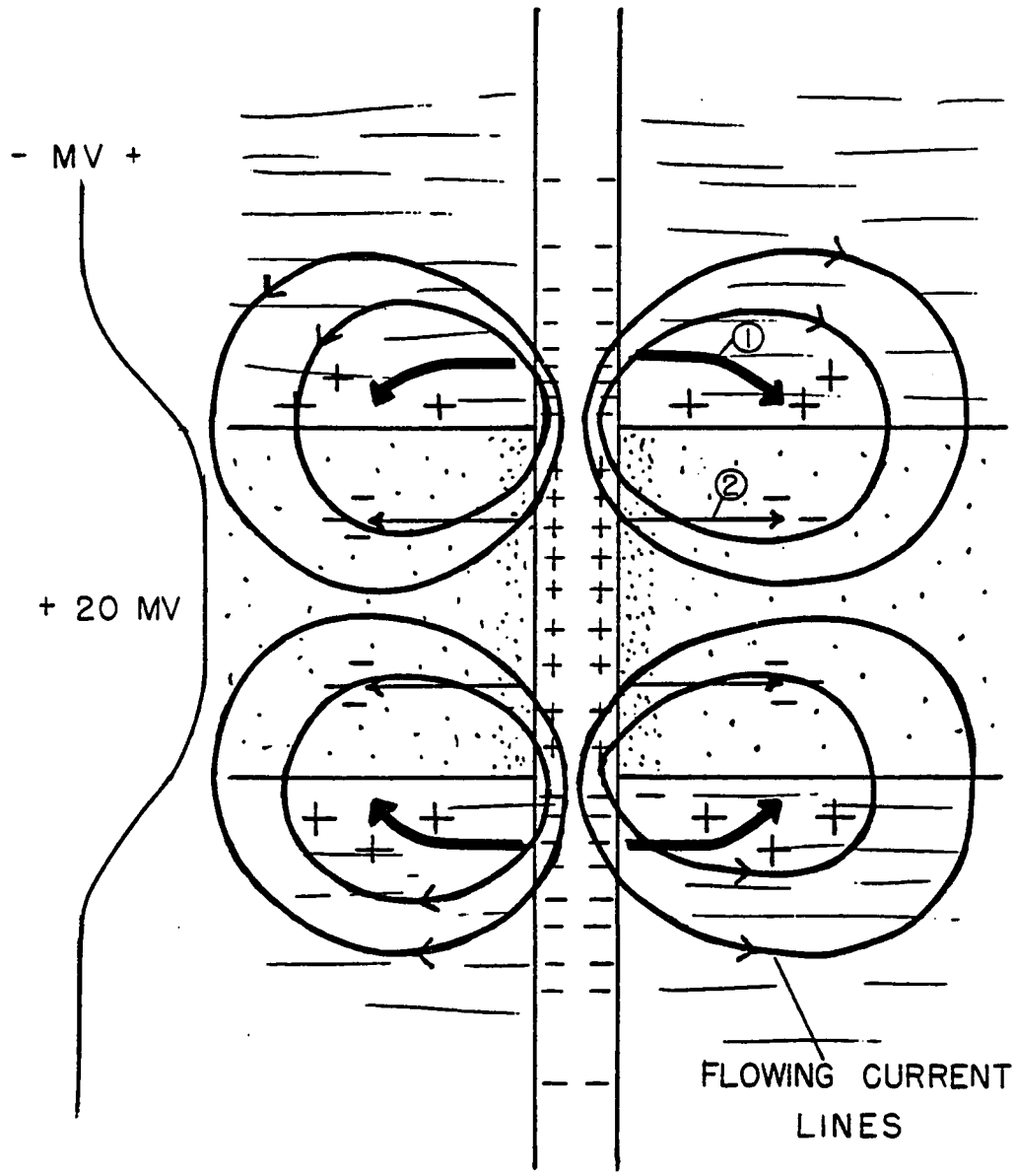


Figure 7. Flowing Current Lines in a Fresh Water Formation

difference being in this case +20 mv. As depicted on the figure a current will flow due to the above conditions. The slope and amplitude of the SP depends on the density of current lines flowing in the mud. The maximum density occurs at the formation top and bottom and thus the SP has an inflection point here. At the center no lines are flowing and the slope is zero.

To relate this phenomenon to potentials measurable in the borehole, some concepts from physical chemistry must be introduced. For a system to be in equilibrium the chemical potential (μ), as well as the temperature and pressure must be the same in each phase. From thermodynamics;

$$dE = TdS - PdV + \left(\frac{\partial E}{\partial n_i}\right)_{v,s,n_i} dn_i + \ldots + \left(\frac{\partial E}{\partial n_n}\right)_{v,s,n} dn_n$$

where: n = moles

The chemical potential $\mu i = \left(\frac{\partial E}{\partial n_i}\right)_{v,s,n}$ i.e., the coefficient of dn. (34) A substance will diffuse spontaneously from a region where its concentration (and μ) is higher to a more dilute region where its μ is lower.

The reversible electrical work in a cell is equal to the product of voltage and the quantity of electricity. The quantity of electrical charge is nF; where n = number of electrons transferred per molecule and F is the Faraday constant. (35) If the electrons are transported through a potential difference of $\mathcal{E}$ volts then the amount of work

required is $nF\mathcal{E}$. Also from thermodynamics ΔG (Gibbs free energy) = $-nF\mathcal{E}$, $\mathcal{E} > 0$. The - is used since $\mathcal{E} > 0$ and ΔG must be less than 0.0 to be spontaneous. The n depends on the chemical equation.

Since for aA and bB = cC + dD

$$\Delta G = \Delta G^{o} + RT \ln \left(\frac{a_C^{\,c}\, a_D^{\,d}}{a_A^{\,a}\, a_B^{\,b}}\right)$$

where: a = activity

G^{o} = the reference G

Also since $\Delta G = -nF\mathcal{E}$ and $\Delta G^{o} = -nF\mathcal{E}^{o}$, then;

$$\mathcal{E} = \mathcal{E}^{o} - \frac{RT}{nF} \ln \left(\frac{a_C^{\,c}\, a_D^{\,d}}{a_A^{\,a}\, a_B^{\,b}}\right) \qquad \text{(Eq. 1)}$$

If all the a's = 1 then $\mathcal{E} = \mathcal{E}^{o}$. Since the equation involves activities the ionic strength of the solution becomes important so that the activity coefficients must be known.

Two other quantities from thermodynamics are also needed at this point. (36)

$$r = RL/A$$

where: r = resistance

R = resistivity

L = length

A = area

Resistivity is a function of temperature since ions move faster at higher temperatures because of lower viscosity.

The resistivity-temperature relationship can be approximated by Arps formula (37):

$$R_T = \frac{R_{75}\ (82)}{(F_T + 7)}$$

where F_T = formation temperature.

Resistivity = 10,000/specific conductance.

Transference number is defined as the fraction of the current carried by the cation or the anion. For the NaCl cation;

$$tc = \frac{Zc\ Cc\ Uc}{Zc\ Cc\ Uc + Za\ Ca\ Ua} = \frac{Uc}{Uc + Ua}$$

where: u = ionic mobility

subscript c = cation

subscript a = anion

Z = number of charges

C = number of moles per cm^3

The common ions and their mobilities at 25°C in ground water other than bicarbonate are Na+ (5.19×10^{-4} cm/sec), Ca++ (6.10×10^{-4} cm/sec), Mg++ (5.30×10^{-4} cm/sec) and Cl^- (7.91×10^{-4} cm/sec). Thus the transference numbers for Na+ and Cl^- respectively are;

$$t^+Na = \frac{5.19}{5.19 + 7.91} = 0.397$$

$$t^-Cl = \frac{7.91}{5.19 + 7.91} = 0.603$$

For any liquid junction potential the differential form of Eq. 1 can be made to equal;

$$E = \frac{-RT}{F} \int_{\text{soln } 1}^{\text{soln } 2} \sum_i \frac{ti}{Zi} \, d \ln a_i, \text{ where } Zi = \text{ valence} \tag{38}$$

for a monovalent salt;

$$E = \frac{-RT}{F} \int_{\text{soln } 1}^{\text{soln } 2} \left(\frac{t^+}{1} \, d \ln a^+ + \frac{t^-}{-1} \, d \ln a^-\right)$$

Integrating, and substituting $t^+ + t^- = 1$ and $a \approx a^+$ and a^-

$$E = \frac{RT}{F} (2t^- - 1) \ln \frac{a_1}{a_2}$$

In general;

$$E = \frac{RT}{ZF} \left(\frac{t^- \nu}{\nu^+} - 1\right) \ln \frac{a_1}{a_2}$$

where: ν = total number of ions

ν^+ = number of positive ions

For Ca^{++}, Mg^{++} and Na^+ and noting that $t^- = 0$ through a clay membrane Gondovin and others have shown in the lab that the following equation holds; (39)

$$E = \frac{-RT}{F} \ln \left(\frac{(a_{na} + \sqrt{a_{ca} + a_{mg}})_1}{(a_{na} + \sqrt{a_{ca} + a_{mg}})_2}\right)$$

When the subscript 1 = formation water and 2 = mud filtrate;

$$E = \frac{-RT}{F} \ln \left(\frac{(a_{na} + \sqrt{a_{ca} + a_{mg}})_w}{(a_{na} + \sqrt{a_{ca} + a_{mg}})_{mf}}\right) \qquad \text{(Eq. 2)}$$

For an NaCL solution at the membrane (Eq. 2) simplifies to;

$$E = \frac{-RT}{F} \ln \frac{a_w}{a_{mf}}$$

Since resistivities are inversely proportional to activities the following equation is defined:

$$E = \frac{-RT}{F} \ln \frac{R_{mfe}}{R_{we}} \qquad \text{(Eq. 3)}$$

This is only true when Na^+ is the only cation, if Ca^{++} or Mg^{++} are present (Eq. 2) must be used or more commonly an empirical relationship between R_{we} and R_w (true resistivity) and R_{mfe} and R_{mf} is developed for the particular local water chemistry. This is the method used in this study and is the only feasible method where water analyses are scarce but well logs are plentiful. Using engineering units the following is obtained;

$$E_m = -(59.15 \text{ @ } 25^oC) \log \frac{R_{mfe}}{R_{we}} \qquad \text{(Eq. 4)}$$

The liquid junction potential is more complicated. Wyllie (40) presents the following equation for this potential;

$$E_L = \frac{-RT}{F} \left(\frac{(U_1-V_1)-(U_2-V_2)}{(U_1+V_1)-(U_2+V_2)}\right) \ln \left(\frac{U_1' + V_1'}{U_2' + V_2'}\right)$$

where: $U_1 = \sum(c_+u_+)_1$ $\qquad V_1 = \sum(c_-v_-)_1$

$U_1' = \sum(c_+u_+Z_+)_1$ $\qquad V_1' = \sum(c_-v_-Z_-)_1$

c_+ and c_- = concentrations of the + and - ions

u_+ and v_- = valences

subscripts 1 and 2 = the different solutions

For a monovalent salt;

$$E_L = \frac{-RT}{ZF} \left(\frac{v - u}{v + u}\right) \ln \frac{c1}{c_2}$$

and using mean activities instead of concentrations;

$$E_L = \frac{-RT}{ZF} \left(\frac{v - u}{v + u}\right) \ln \frac{a_1}{a_2}$$

Using engineering units;

$$E_L = -11.5 \log \frac{a_w}{a_{mf}} @ 25^oC$$

and;

$$E_L = -11.5 \log \frac{R_{mfe}}{R_{we}} @ 25^oC$$

therefore;

$$E_c = E_L + E_M = -(11.5 + 59.15) \log \frac{R_{mfe}}{R_{we}} @ 25^oC$$

$$E_c = -70.65 \log \frac{R_{mfe}}{R_{we}} @ 25^oC$$

At any temperature, T;

$$SP = E_c = -(60 + .133(T)) \log \frac{R_{mfe}}{R_{we}} \quad (41) \qquad \text{(Eq. 5)}$$

These concepts have been tested in the laboratory and in the field in saline waters where Na^+ predominates. Applications to fresh water are very limited.

4. Environmental Effects on the SP - The SSP

Since current is flowing as depicted on Figure 7 the complete circuit is mud/shale/sandstone/mud again. If the total current is I, then there is a voltage drop in each zone (mud, shale, sandstone) which when added together equals the total emf. This voltage is called the static spontaneous potential (SSP) and is expressed as Vm + Vsh Vsd = SSP. SSP is the voltage which reflects the true water chemistry and is the quantity which must be used to find Rw and hence TDS.

Also;

$$I = \frac{V_m}{r_m} = \frac{V_{sh}}{r_{sh}} = \frac{V_{sd}}{r_{sd}}$$

where: r is the resistance of the mud, shale and sandstone. The SP as defined earlier is actually Vm or the voltage measured in the mud. Since;

$$SSP = V_{sh} + V_m + V_{sd}$$

and

$$SSP = I\ (rsh + rm + rsd)$$

then;

$$I = SSP/(rsh + rm + rsd)$$

and since $I = V_m/r_m$;

$$SP = V_m = \frac{SSP\ (rm)}{(rsh + rm + rsd)} \qquad \text{(Eq. 6)}$$

Therefore, theoretically for SP = SSP, rsh + rsd = 0. Since rsh + rsd $\neq$ 0, especially in fresh water, corrections must

be applied. As defined earlier;

$$r = RL/A \qquad \text{(Eq. 7)}$$

where: r = resistance L = length

R = resistivity A = area

When (Eq. 7) is substituted into (Eq. 6):

$$SP = \frac{SSP\ (R_{mud}\ L_{mud}/A_{mud})}{(R_{mud}\ L_{mud}/A_{mud} + R_{sh}L_{sh}/A_{sh} + R_{sd}L_{sd}/A_{sd})}$$

Figure 8 depicts the location of these quantities.

In a thick sandstone surrounded by thick shales the current flares out in the sandstone and shale to reach minimum resistance. When this happens L increases, but A also increases and is a squared term. A may reach 50-100 feet in the borehole and the horizontal A may be in acres. A_{mud}, which is the area of the borehole, is small and constant. Invasion effectively increases the A_{mud} term.

Thus thin resistive beds lower the SP from SSP and thick conductive beds increase the SP to nearly SSP. Also a high R_{mud} increases the voltage drop in the mud and SP approaches SSP. In very salty mud even with thick sandstones SP will be considerably lower than SSP. In oil field work, for which this theory was developed and extensively tested, the formation waters are usually salty and except for very thin beds SP $\approx$ SSP. Very resistive beds in oil field work are usually nonporous and not of interest. Correction factors are published and in the next section are

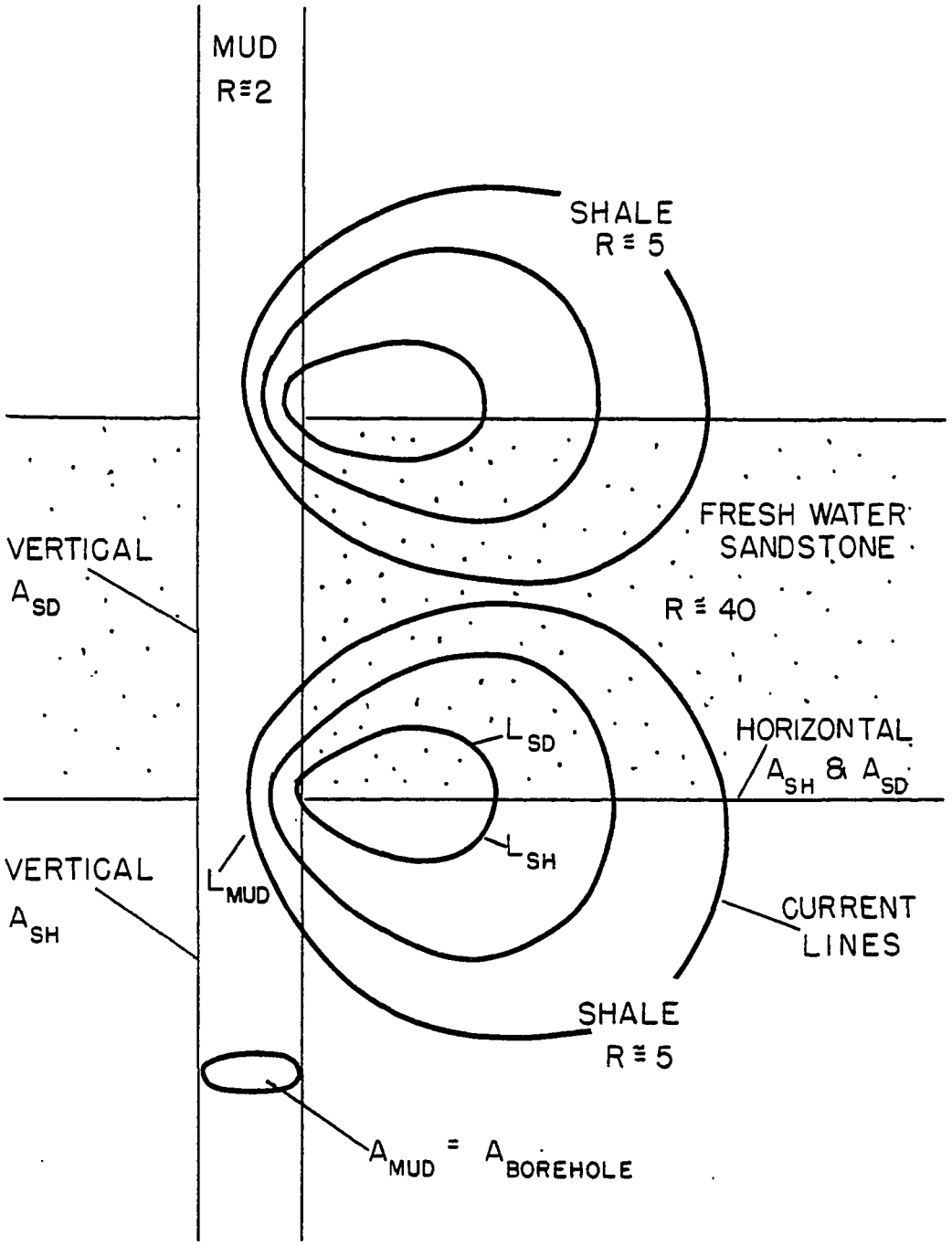


Figure 8. Quantities Used in Relating SP to SSP

examined using a considerable amount of data. Modifications are needed to get accurate R_w measurements in this study area.

SECTION IV

CALCULATION OF TDS

To calculate groundwater reserves by TDS for this large geologically complex area various kinds of data had to be compiled, the existing equations modified, and all put into a computer processable form.

1. Data Collection - Well Logs

The density of control chosen for the study was at least one log per quarter section where available. A screening process was set up which was used to screen through several thousands of well logs at the Oklahoma City Geological Society Well Log Library. The screening and computer coding process took several months to complete. The screening consisted of the following:

1) Choosing logs with Rmf's of less than two if available; if not available higher Rmf's were chosen. This was the first criterion, since the Rmfe-Rmf relationship is the most difficult

of all parameters to find as will be discussed later. By keeping the Rmf (@ 75°F) at or below 2Rm the Rmfe ≈ Rmf.

2) When choosing from logs of the 1950's the one with the shortest surface casing and no noise on the SP was selected per quarter section.

3) Most new logs were chosen without regard for the density if the Rmf was correct.

This screening resulted in a data base of 805 wells which was later edited down to 703 wells.

The data collected from the logs consisted of information about the well including well location, well name, kelly bushing, ground level and datum elevations, year and month drilled, total depth, surface casing depth, bottom hole temperature, resistivity of mud (Rm) (or mud filtrate if available), temperature of mud filtrate at the surface (Tmf). Data from individual fresh water formations included a label number, SP, formation top, formation bottom, thickness of permeable beds, bulk density (if available), deep resistivity (either 19' lateral or deep induction), medium resistivity (if available), shallow resistivity (from 16" normal or Laterolog 8), a formation code (0 for Oscar and 1 for Garber Wellington), and a comment field concerning the quality of the permeability (i.e., a qualitative estimate of the shale present in the sandstones). This was done for all formations down to where the water was

obviously salty. Where SP's were the same and resistivities were similar, some beds were combined. All of this information, except for the mud resistivity, was coded in the form of input for a computer program developed by the author. Mud resistivity was converted to Rmf first by the Schlumberger charts. (42) The formation code required making an isopach map of the Garber-Wellington formation in Carter County from hundreds of well logs available at the Log Library. Figure 9 shows the depth to the base of the Garber-Wellington (below the regolith which was 150-200 feet in most of the county) as determined by well logs. This is a rather large scale representation of a much larger map at a more detailed scale. The base of the Garber-Wellington was picked as the base of a group of correlatable reservoir rocks, using the outcrop areas as control. This correlation was interpreted by the author and the pick may not exactly match the true geologic base as determined from fossils or mineral suites, etc.

Two separate programs were written, one for outputting the data in a manner which could be easily verified and one which appears in this thesis and contains the computations and condensed output format. All the data was punched on cards and verified.

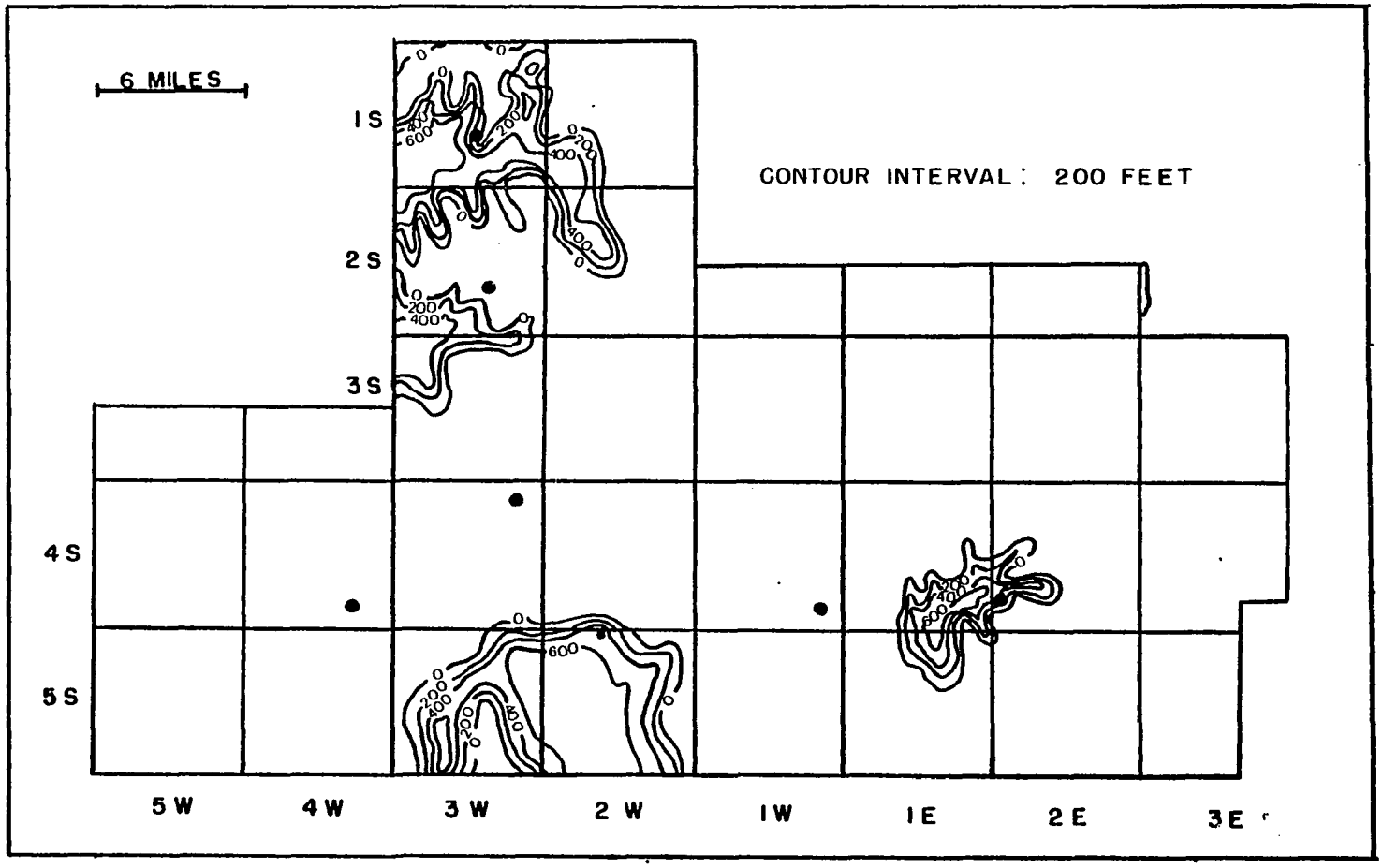


Figure 9. Depth to the Base of the Garber-Wellington

2. Rwe vs Rw Data Collection

When (Eq. 3) is rearranged, letting K = 2.3 RT/F, an expression for Rwe is obtained (i.e., Rwe = Rmfe/ $10^{-(SP/K)}$) where K = 60 + .133(T) for any temperature. Therefore, knowing the SP, the formation temperature and the Rmfe, one can find Rwe. This is the resistivity of an NaCl solution and is equal to the true resistivity (Rw) when NaCl is the predominant salt. However, looking at (Eq. 2),

$$SP = -K \log \frac{(a_{na} + \sqrt{a_{ca} + a_{mg}})_w}{(a_{na} + \sqrt{a_{ca} + a_{mg}})_{mf}}$$

when Ca^{++} or Mg^{++} is present in even moderate amounts in fresh waters the square root term has a large effect on the SP and the Rwe may vary greatly from Rw as measured by specific conductance. When the mud is essentially an NaCl solution the effect of having Ca^{++} and Mg^{++} in the formation water is to lower the SP, making the water look saltier than it really is. Since Ca^{++} and Mg^{++} are common in fresh water Rw always varies from Rwe.

In order to find Rw from Rwe an empirical relationship had to be found. This necessitated collecting all available chemical analyses of the Oscar and Garber-Wellington over a wide range of TDS. Sources of data included published reports (43,44,45), the Water Resources Board, Oklahoma State Health Department, oil companies, and in one case having a new analysis run. Table 3 lists the portion of the chemical

TABLE 3

Rwe-Rw ANALYSES FOR DEEP GROUNDWATER - CARTER AND EASTERN JEFFERSON COUNTIES

Number	Location	Formation	Year	Ca^{++}(mg/l)	Mg^{++}(mg/l)	Na^{+} (mg/l)	TDS (mg/l)	RW (Ωm)	Rwe (Ωm)
1	Ardmore[1]	Oscar	1959	6.4	4.1	187	513	12.4	3.1
2	Healdton[2]	Oscar	1978	5.3	2.5	350	1159	7	3.15
3	Ratliff City[2]	Oscar	1978	23.8	11.3	270	840	8	2.1
4	Lone Grove[2]	G-W	1978	63.1	30	43	451	15	1.65
5	Western Carter[2]	Oscar	1978	2.1	1	240	652	10.4	4.0
6	Wilson[1]	Oscar & G-W	1951	56	18	113	514	12.2	2.1
7	Healdton[1]	Oscar	1951	2.7	1.4	437	1060	5.85	3.0
8	Healdton[3]	Oscar	1953	8	4	212	591	10.2	3.2
9	Lone Grove[4]	G-W	1980	34.4	16.4	176	490	11.1	2.05
10	Wilson[4]	Oscar	1980	11.9	5.7	173	526	12.2	3.05
11	Ringling[5]	Oscar	1969	4.2	2.5	278	663	11.1	3.0
12	Wilson[5]	G-W	1969	45.8	15.3	201	514	11.15	1.95
13	Healdton[5]	Oscar	1969	6.3	2.5	431	1060	6.4	2.5
14	Fox[5]	Oscar	1969	8.3	5.1	343	1225	7.5	2.7
15	Wildcat Jim[6]	Oscar	1973	17	17.3	113	454	17.1	3.1
16	Wildcat Jim[6]	Oscar	1973	22	11	129	543	14.2	2.6
17	Wildcat Jim[6]	Oscar	1973	25	11.7	147	641	13.9	2.5
18	Wildcat Jim[6]	Oscar	1973	2.4	2.4	221	733	11.3	3.95

Sources:
1) USGS, Water Resources Division
2) Water Resources Board, Rural Water Systems in Oklahoma
3) Department of Interior, Bureau of Mines
4) Oklahoma State Health Department
5) U.S.G.S. Water Atlas
6) Water Resources Board, files

TABLE 3 (continued)

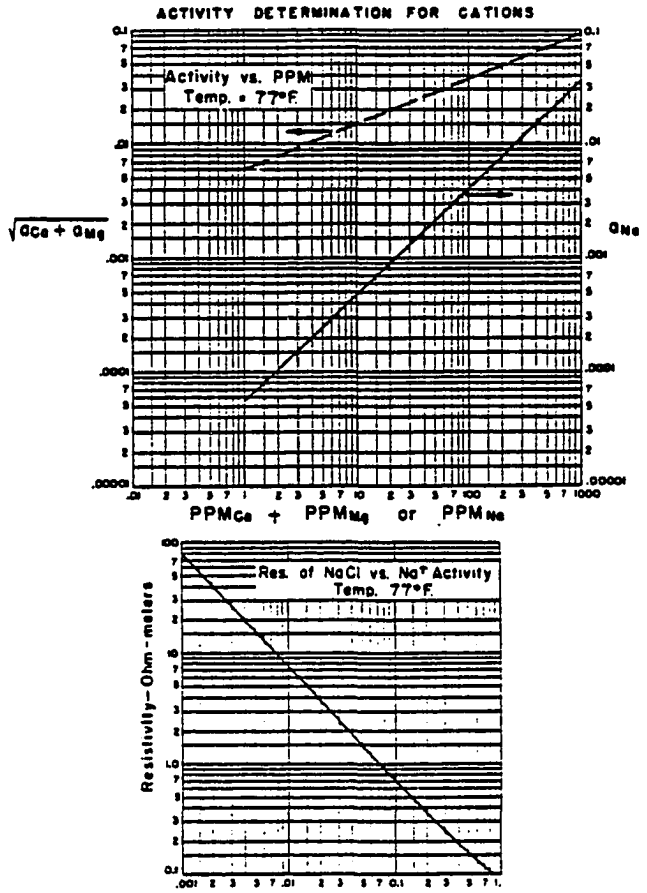
Number	Location	Formation	Year	Ca++(mg/l)	Mg++(mg/l)	Na+ (mg/l)	TDS (mg/l)	RW (Ωm)	Rwe (Ωm)
19	Wildcat Jim[7] 8-2S-2W	Oscar	1974	101	25	529	1833	3.25	1.25
20	Wildcat Jim[7] 17-2S-2W	Oscar	1974	120	72	460	1808	3.3	1.105
21	32-1N-3W[8]	Oscar	1971	4	1	612	1985	4.03	2.2
22	32-1N-3W[8]	Oscar	1971	35	19	2940	7719	0.813	0.58
23	32-1N-3W[8]	Oscar	1971	68	35	4520	11904	0.549	0.39
24	32-1N-3W[8]	Oscar	1971	1920	884	21407	63610	0.133	0.105
25	32-1N-3W[8]	Oscar	1971	2660	1030	24350	73645	0.116	0.1
26	32-1N-3W[8]	Oscar	1971	3120	1220	27200	80903	0.107	0.091
27	32-1N-3W[8]	Oscar	1971	3660	2740	29200	95248	0.083	0.082
28	32-1N-3W[8]	Oscar	1971	4800	2420	31900	103977	0.083	0.08
29	32-1N-3W[8]	Oscar	1971	6220	1800	47700	145627	0.076	0.078
30	Healdton[4]	Oscar	1980	4	3	490	1154	5.3	2.45
31	Fox[9]	G-W	1981	12.1	13	1925	3684	1.12	0.81

Sources: 7) Getty Oil Company
8) Edwin Cox Company
9) Keith F. Walker Company

analyses used for the Rwe-Rw graph. When the Rw was not available by specific conductance it was calculated using the Dunlap method. (46) Rwe was calculated by converting the analyses in mg/l (=PPM as $\rho \approx 1$) to activities from published charts. (47,48) The sum $a_{Na^+} + \sqrt{a_{mg^{++}} + a_{ca^{++}}}$ was then entered in a published a_{Na^+} - Rwe graph and Rwe was obtained. The charts (after Alger) used to find Rwe are shown in Figure 10.

Figure 11 is the Rwe-Rw relationship on log-log paper plotted from Table 3. Oscar data points are dots and Garber-Wellington points are X's. Rwe values from wells which were comingled in both zones plotted in the middle and were omittted. The straight line is the Rwe=Rw line (i.e., if the only cation was sodium). Very salty values plot near the Rwe=Rw line since the a_{Na^+} predominates over the $\sqrt{a_{mg^{++}} + a_{ca^{++}}}$ value.

A curve was hand drawn to the Oscar data since the unusual shape of the data would not allow least squares to fit an accurate enough equation. The Garber-Wellington data was too sparse to fit a curve. To get a meaningful Rwe-Rw curve for the Garber-Wellington, data from the Garber-Wellington in Cleveland and Oklahoma Counties (49) was examined. Data from wells deeper than 200 feet was picked and the Rwe-Rw relationship was determined. This is shown on Figure 12. The data from Carter County was combined with the portion of data from Cleveland and Oklahoma Counties for



TO FIND R_{WE}

(1) ADD PPM (MG/L) CA+ MG

(2) ENTER TOP CHART WITH PPM CA+ PPM MG AND PPM NA TO GET $\sqrt{A_{CA} + A_{MG}}$ AND A_{NA}

(3) ADD ACTIVITIES TO GET $A_{NA} + \sqrt{A_{CA} + A_{MG}}$

(4) ENTER THE LOWER CHART WITH THE SUM TO GET THE RESISTIVITY OF NA CL (I.E. R_{WE})

Figure 10. Charts Used to Find R_{we} (After Alger)

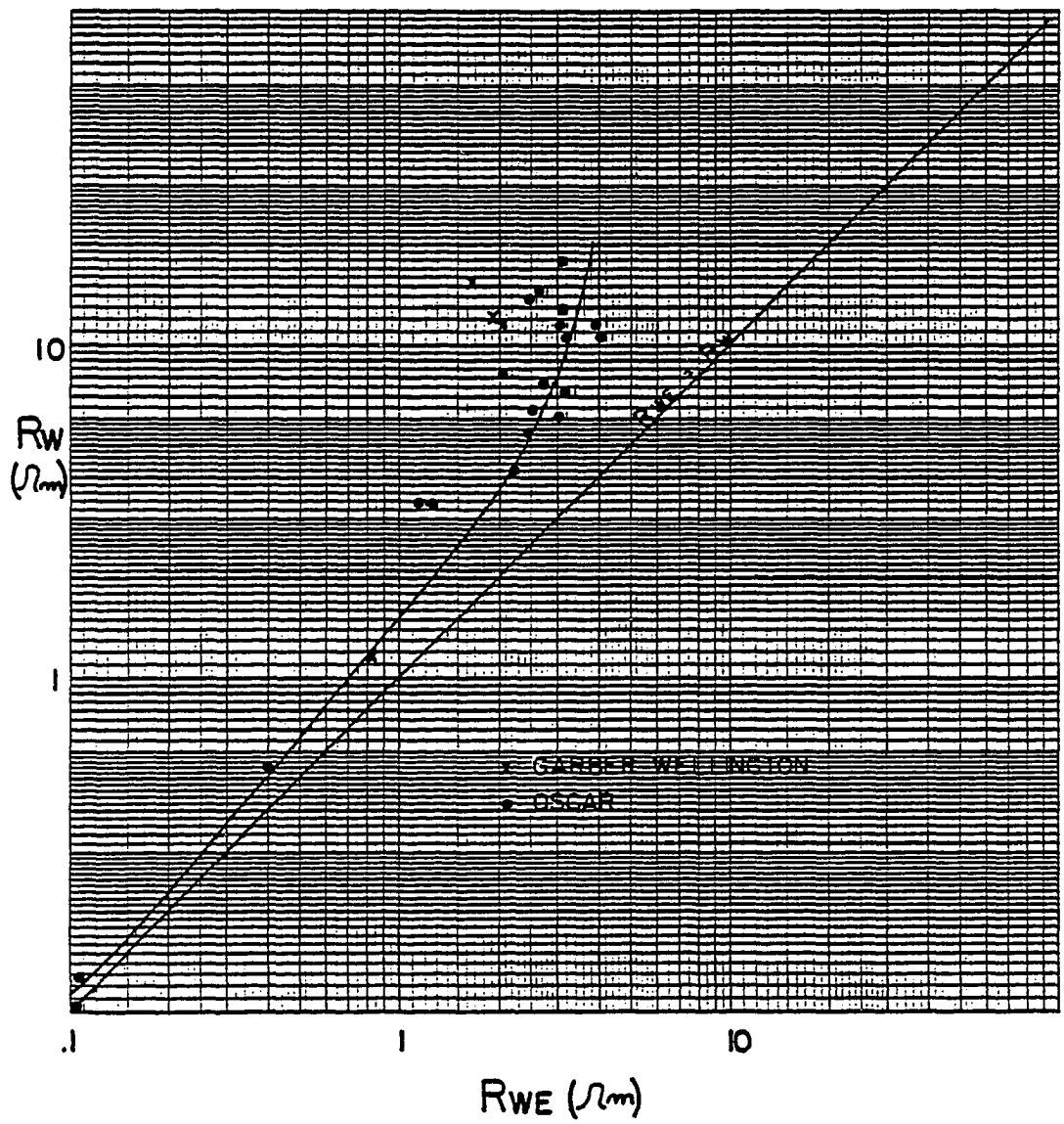


Figure 11. R_{we}-P_w Relationship

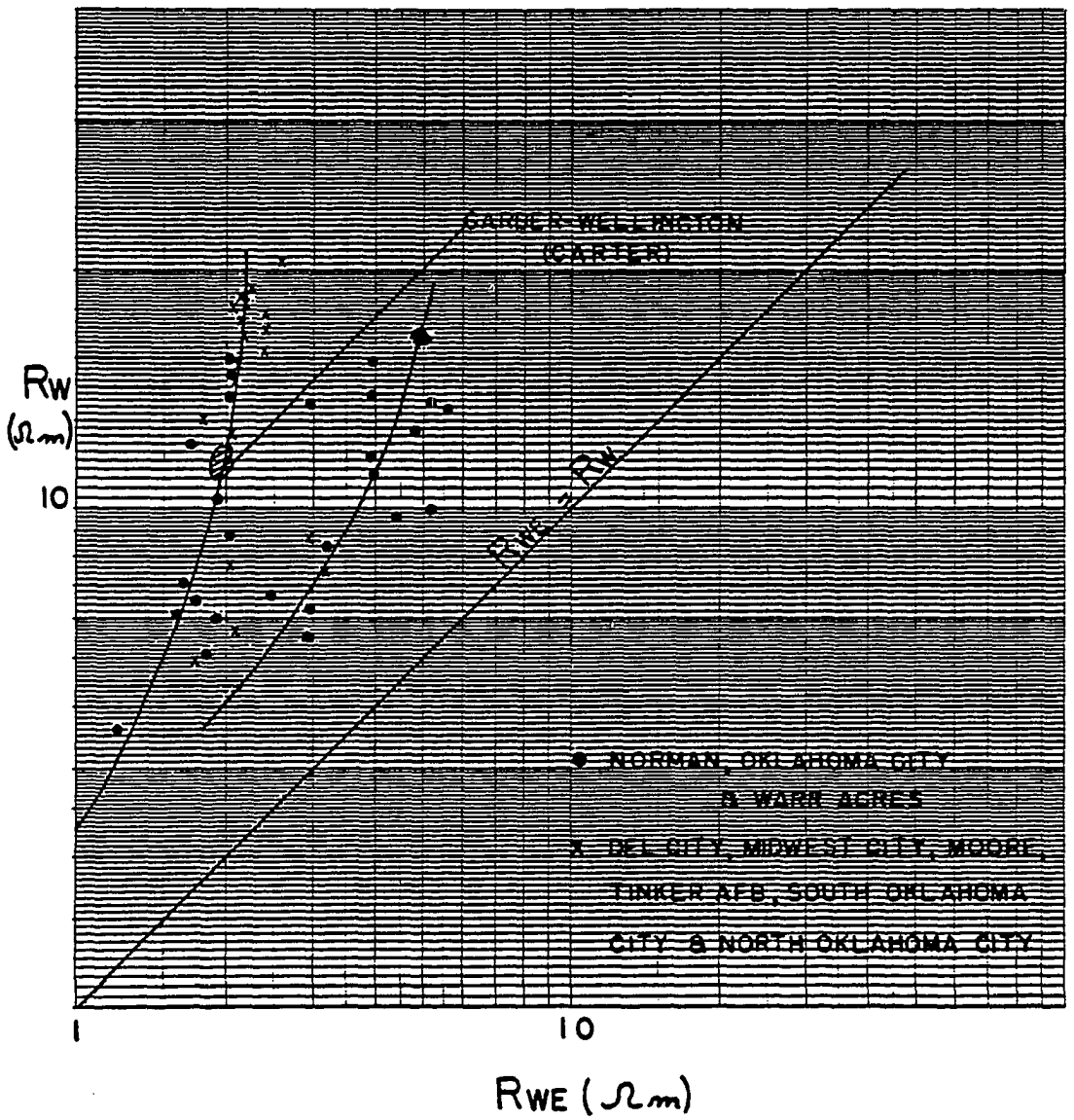


Figure 12. R_{we}-R_w Relationship for Cleveland and Oklahoma Counties

which it most nearly fit (Figure 13). The curve for this data was also hand fit. Since the Garber-Wellington is really volumetrically minor in the study area, this was considered sufficient. The author believes that this curve will yield very good results in the study area. The Garber-Wellington curve is nearly the same as the Schlumberger Curve of Gondovin and Tixer. (50)

This data also shows the variability of the Rwe-Rw relationships, both vertically in the rock section but also laterally even in the same formations. This process then must be done in every area where well logs are used to estimate salinity in very fresh water. However, it is also evident that most of these Rwe-Rw relationships converge at 7000-10,000 TDS so that in Oklahoma, at least, the error in predicting where to set surface casing should be small regardless of the curve used. Other published Rwe-Rw curves for Wyoming and the Houston, Texas area demonstrate this extreme variability. (51,52)

3. TDS-Rw Relationships

Using the data from Table 3 again, TDS was plotted against Rw on log-log paper and a curve was fit for both the Oscar and the Garber-Wellington (Figure 14). Because of the scarcity of data for the Garber-Wellington the curve was made to conform to the Oklahoma and Cleveland County data.

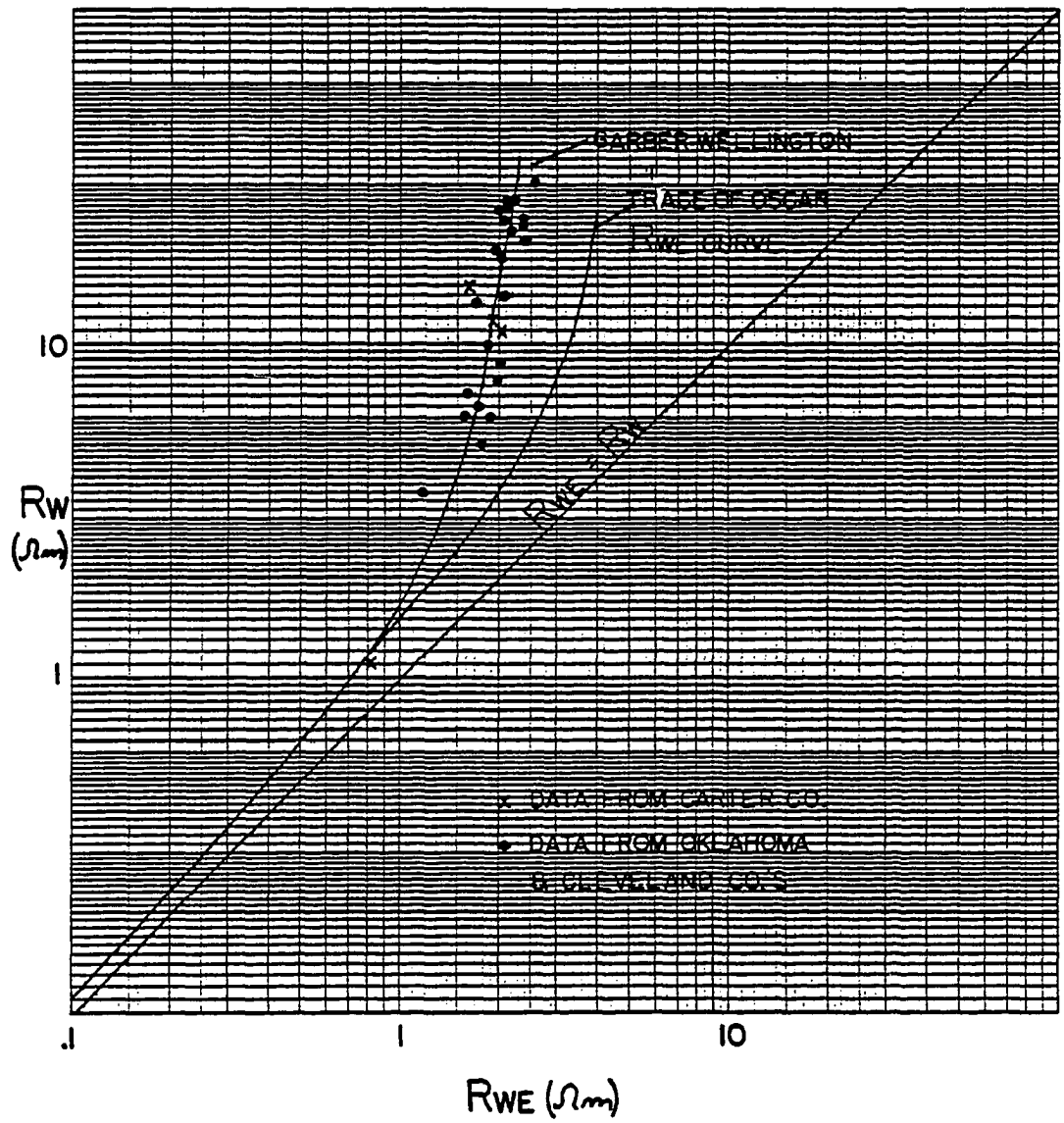


Figure 13. R_{we}-R_w Relationship for the Garber-Wellington (Carter County)

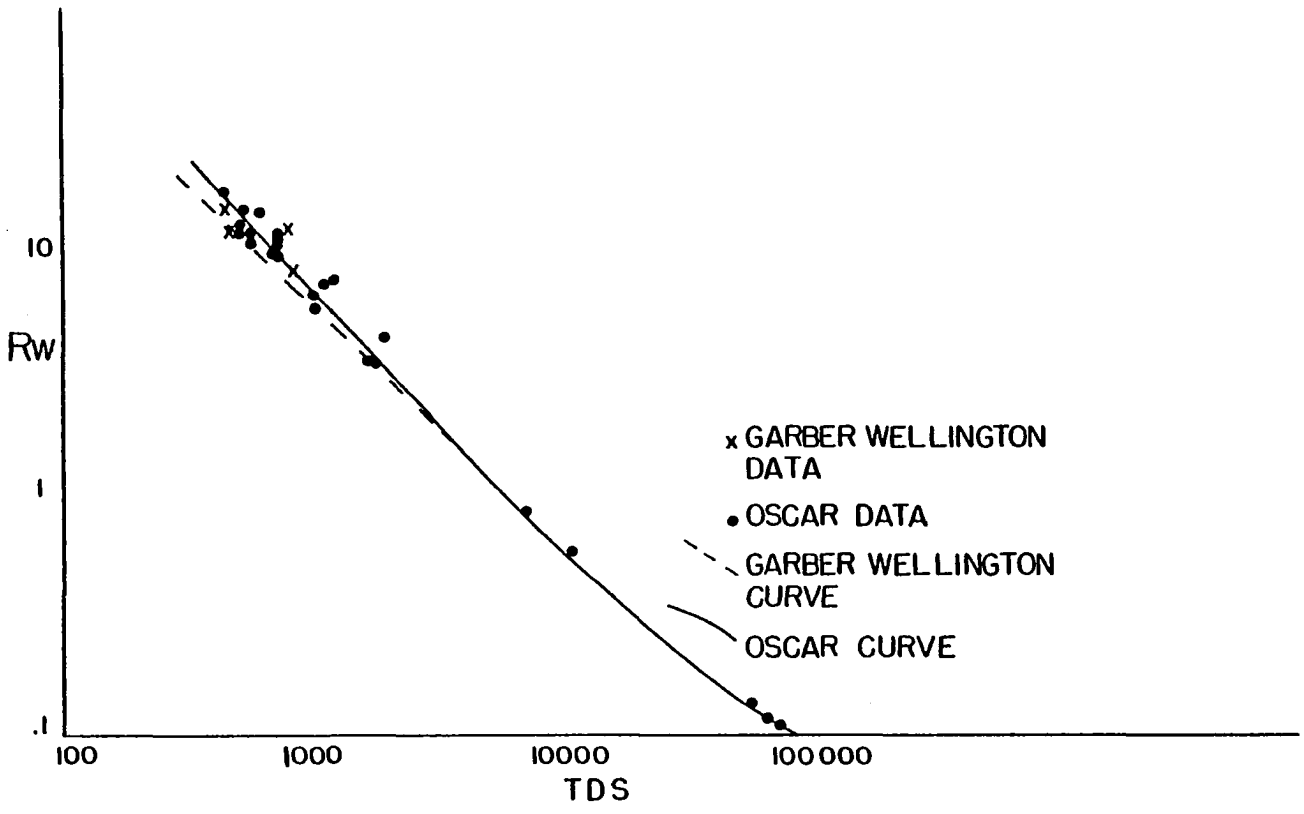


Figure 14. TDS-R_w Relationship

With the Rwe-Rw and Rw-TDS relationships defined, the curves were digitized and set up in a data table for the computer program.

4. Rmfe vs Rmf and Environmental Corrections

Even though the drilling mud is easy to sample and analyze, the Rmfe-Rmf relationship is the most difficult relationship to find. Chemicals are constantly added to the mud stream and the mud is not in chemical equilibrium. Even if the analysis is done concurrently with the logging, the Bentonite clays in the mud will take up some of the Ca^{++} and Mg^{++} thus reducing the transference of these cations. Analysis of a number of muds led to the common usage of Rmfe = .85 Rmf. Using well logs in waters of known Rmfe and SP the author found that this equation was incorrect in many instances. In building the data base, although most of the Rmf's @ 75°F were less than 2, many logs with Rmf's between 2 and 2.5 had to be used for adequate control. The determination of this Rmfe-Rmf function was done in conjunction with the environmental corrections and is presented in that section.

Because;

$$SP = \frac{SSP\ (R_{mud}\ L_{mud}/A_{mud})}{(R_{mud}L_{mud}/A_{mud}+R_{sh}L_{sh}/A_{sh}+R_{sd}L_{sd}/A_{sd})}$$

a reservoir bed which is thin and resistive may have an SP

which varies considerably from SSP. In using electric analog modeling Worthington and Moldan (53) produced departure curves for a wide range of resistivities and bed thicknesses. Using an Rsh of 5, values were chosen from these curves to produce departure curves which were specifically for the Oscar. The resulting curves fit very closely to a set of published curves for "average conditions" by Dresser Atlas (54) shown in Figure 15. Referring to the figure, Ri (resistivity of invaded zone) was taken to be the deep resistivity and Rm (resistivity of the mud) was taken as RMF @ 75^{o}F. The five curves were digitized as well as interpolated curves drawn by the author between the published curves. For purposes of the TDS computer program, equations were fit to all the curves by least squares on a computer. This correction was applied to all data for which the bed thickness was between 10 and 50 feet. The error in beds of less than 10 feet is too great and such beds were not considered by themselves, but assigned SP's of the nearest bed greater than 10 feet. The correction factor for beds greater than 50 feet was always equal to 1.0 for the Oscar rocks.

With the Rwe-Rw relationship, low Rmf's (Rmfe$\approx$Rmf) and bed thickness-resistivity correction factors in hand, several computer tests were run on groups of well logs with known or estimated Rwe's. As described in the following, it was soon found that major modifications of the environmental corrections and Rmfe-Rmf were needed to get accurate

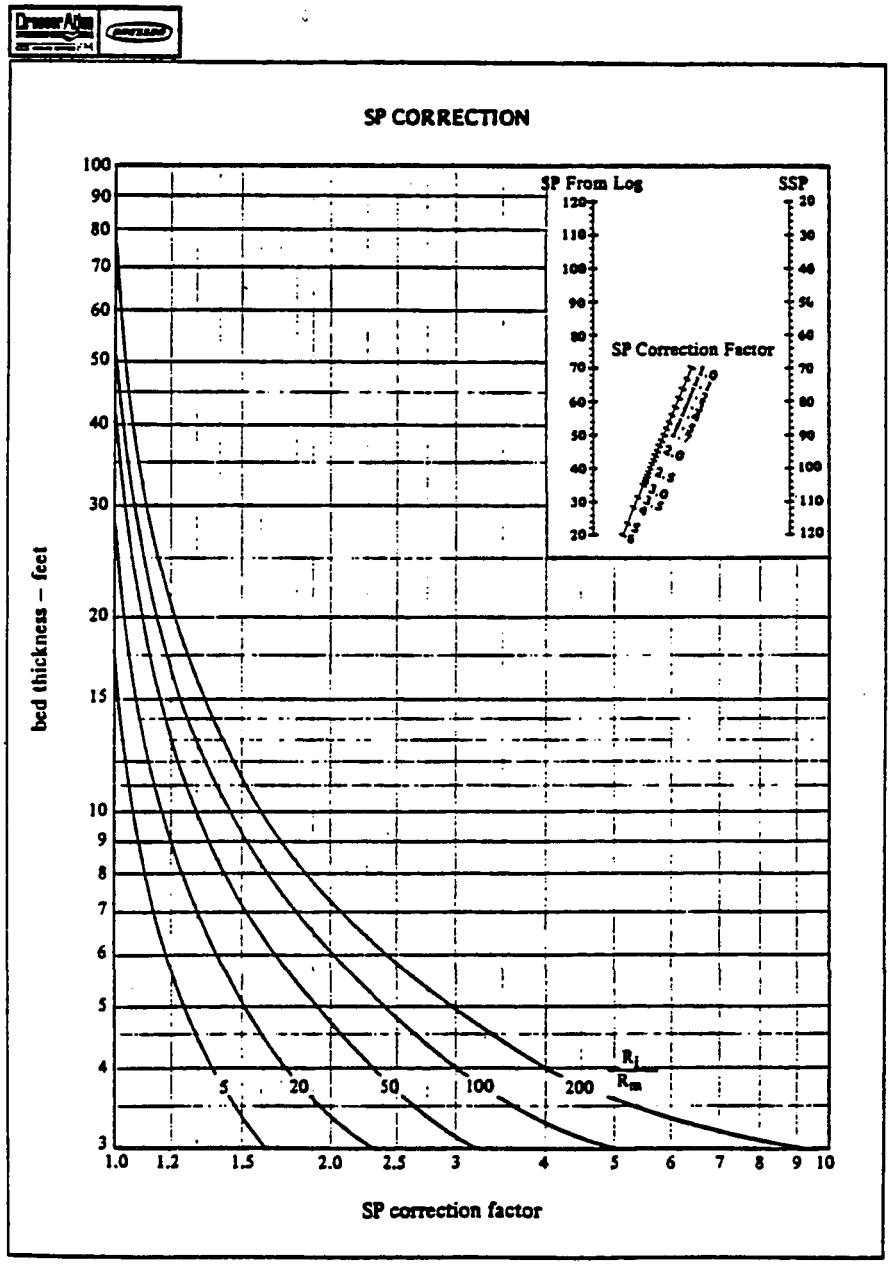


Figure 15. SP Correction Factor for Bed Thickness and Resistivity

reproduceable results from log to log in these known water chemistry zones.

5. Statistical Correction Factors

Over 75 well logs were carefully correlated in the fresh water zones from four different areas in the county. In each of the four areas the Rwe was known (three by chemical analysis and one by estimating the TDS from knowledge of the water usage in the area). The Rwe $\approx$ 3.3 for all the areas. A thick zone was chosen in each control well, the logs were correlated, and the same zone was marked on all the logs. The zones chosen were thick enough that the correction factor discussed in the previous section $\approx$ 1. By doing this the previously published correction factors commonly used in oil field work were not a consideration. The Rmf's and Tmf's were taken from the log headings and SP's were measured off each zone. The Rmf's were corrected to $75^{o}F$ and the data was plotted as SP vs RMF @ $75^{o}F$ (RMF75). The few data points which clearly plotted away from the other data were noted and those well logs were looked at again. In most cases these zones contained shale or the log headings were obviously in error. These points were eliminated and left a data set of 75 observations. The data was then used in a SAS (Statistical Analysis System) data set and run on the computer. The observations are listed in Table 4 and

plotted on Figure 16. The best fit equation was cubic (i.e., SP = 58.311 - 66.265 RMF75 + 37.642 $RMF75^2$ - 7.333 $RMF75^3$) and is shown on Figure 16. Also on Figure 16 is a plot of the theoretical Sp vs. Rmf75 for

$$SP = -(60 + .133(75^{o}F)) \log \frac{Rmf75}{Rwe} = -70 \log \frac{Rmf75}{3.3}$$

Only where the two curves cross is no correction needed. For values of Rmf75 less than 1.8, SP units (millivolts) need to be added and for values greater than 1.8, SP units need to be subtracted to match the theoretical values.

The author attributes the variation to two reasons, the effects of which are combined and cannot be separated accurately. For Rmf75 values less than 1.8 the difference becomes increasingly larger as Rmf decreases.

Since;

$$SP = \frac{SSP\ (R_{mud}\ L_{mud}/A_{mud})}{(R_{mud}L_{mud}/A_{mud} + R_{sh}L_{sh}/A_{sh} + R_{sd}L_{sd}/A_{sd})}$$

as R_{mud} decreases, especially with high R_{sd} as in fresh water, the SP falls below SSP. In the field this decrease in SP is greater than predicted by the analog modeling of Worthington and Molden which represent the common corrections used by the oil industry today. The lower limit of the equation was taken as 0.75 Ωm because of lack of data. Wells in the original 805 well data set with RMF75's of less than 0.75 Ωm were edited out. This lowered SP effect disappears at RMF75's of 1.7-2.0 where the mud resistivities are high enough that the A_{sd} and A_{sh} terms dominate the

TABLE 4

RMF75-SP RELATIONSHIP FOR RMF75
BETWEEN 0.75 AND 2.5

(Includes 32-1N-3W, 1-5S-2W, 14-2S-3W, 21-1S-3W)

OBS	RMF75	SP
1	0.56	35
2	0.70	22
3	0.83	30
4	0.89	23
5	0.95	32
6	0.97	15
7	0.98	20
8	0.99	21
9	1.01	20
10	1.02	22
11	1.06	23
12	1.08	26
13	1.08	23
14	1.14	17
15	1.16	17
16	1.20	17
17	1.22	18
18	1.32	25
19	1.34	20
20	1.36	22
21	1.38	17
22	1.39	20
23	1.40	18
24	1.42	20
25	1.46	19
26	1.47	22
27	1.48	23
28	1.50	17
29	1.52	17
30	1.54	20
31	1.58	18
32	1.59	16
33	1.59	20
34	1.62	19
35	1.65	14
36	1.70	20
37	1.70	25
38	1.71	19
39	1.73	18
40	1.74	23

TABLE 4 (continued)

OBS	OBS	RMF75	SP
	41	1.76	15
	42	1.78	15
	43	1.79	18
	44	1.80	18
	45	1.80	23
	46	1.81	14
	47	1.83	20
	48	1.83	21
	49	1.90	10
	50	1.95	20
	51	1.95	15
	52	1.97	15
	53	1.97	21
	54	2.04	13
	55	2.04	17
	56	2.07	20
	57	2.07	30
	58	2.12	16
	59	2.13	19
	60	2.15	15
	61	2.15	15
	62	2.20	11
	63	2.20	13
	64	2.23	15
	65	2.23	14
	66	2.25	19
	67	2.28	17
	68	2.29	12
	69	2.29	19
	70	2.32	14
	71	2.42	19
	72	2.48	12
	73	2.52	16
	74	2.74	8
	75	2.83	6

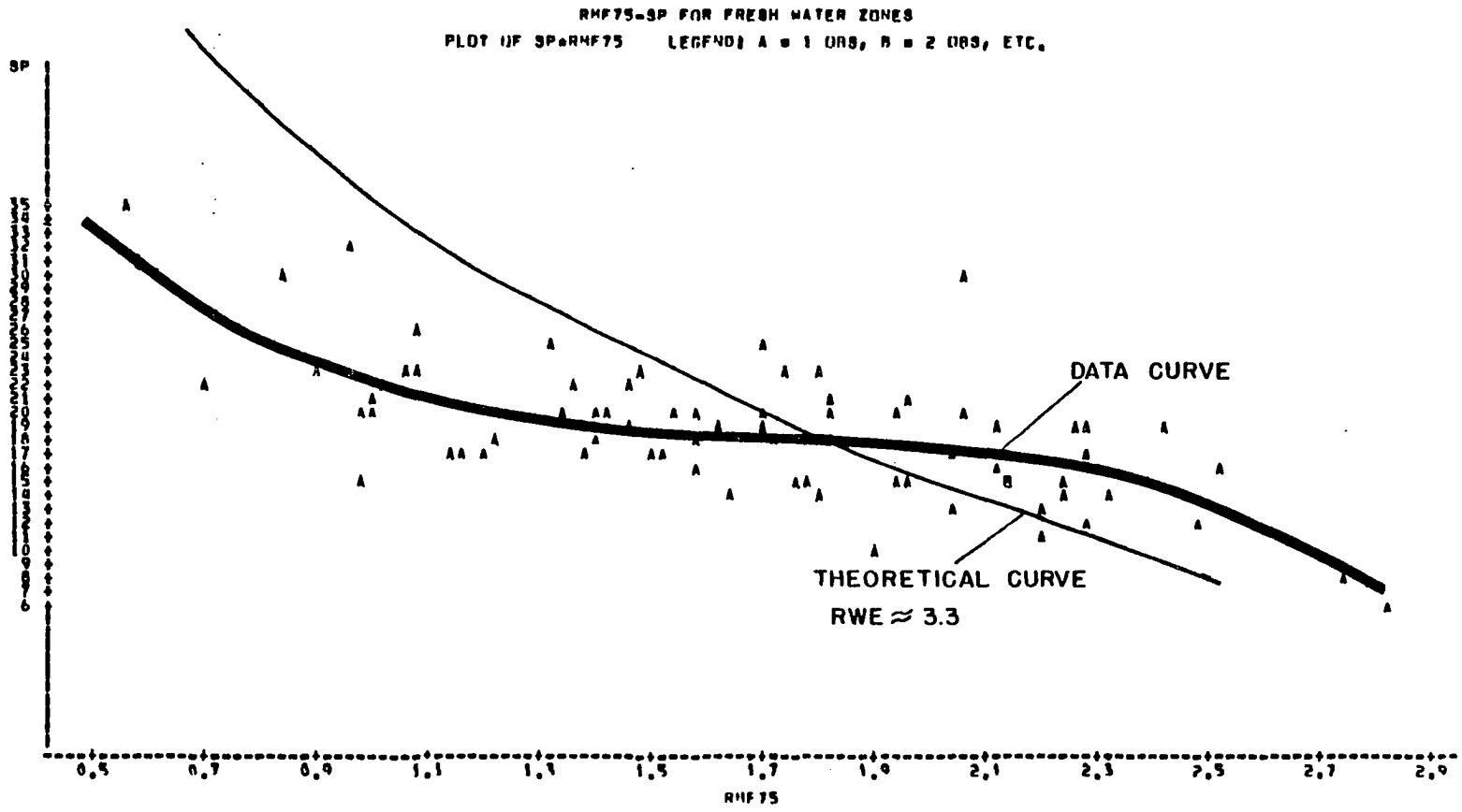


Figure 16. Field and Theoretical Curves for RMF75 vs SP

equation and SP ≈ SSP with only the previous corrections for bed thickness necessary.

For values of RMF75 greater than 1.8 another explanation is necessary, as the correction is reversed and SP units must be subtracted to match the field data. If one examines the Rwe-Rw relationships of Figure 13 it is noted that the slopes of the curves change rapidly at about 2 m. The author believes that for those values of RMF75 greater than 1.8 the Rmfe begins to vary from Rmf. Before this some of the Ca^{++} and Mg^{++} is probably tied up by the clays and the mud is essentially a NaCl solution. It is also noted that for RMF75 values of greater than 2.0 using Rmfe = .85 Rmf, as is done in oil field work, approximates the field data and does not introduce great error. For RMF75 values less than 1.8 this rule of thumb equation adds a considerable error. The upper limit, because of lack of data, was set at 2.5. Again the original data set of 805 wells was edited and values much greater than 2.5 were cut out. All the editing combined brought the data set down to 703 wells.

The difference between the least squares curve and the theoretical curve on Figure 16 is the combined correction factor for the environmental effects on the Sp and the Rmfe-Rmf relation. This difference, as a function of RMF75, was put into a SAS data set and an equation was fit to the data. This data is plotted on Figure 17. The resultant

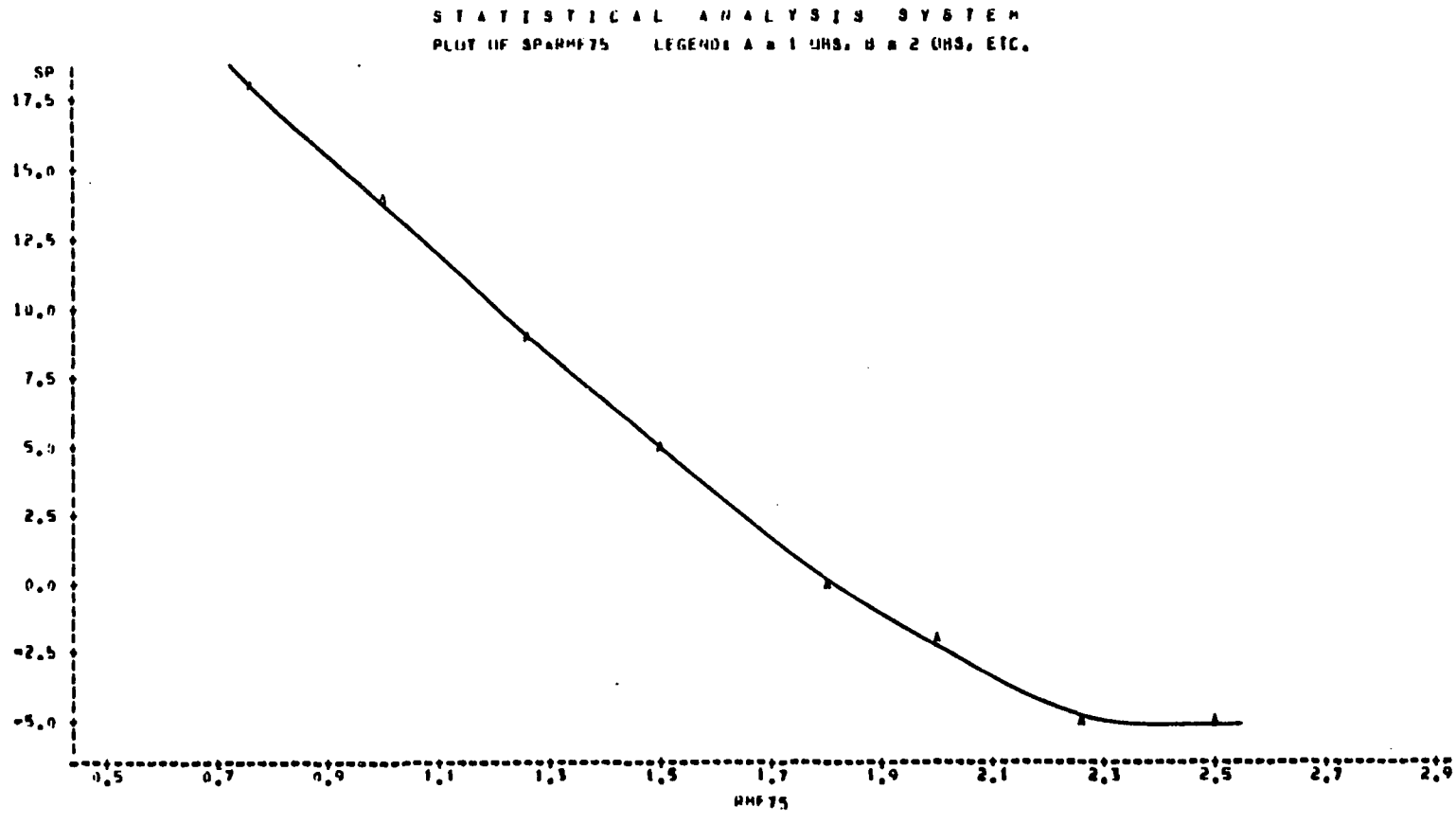


Figure 17. Curve for Combined Correction Factor

equation given below is used in the computer program.

$$SPCOR2 = 25.163 - 1.147\ RMF75 - 14.061\ RMF75^2 + 3.868\ RMF75^3$$

This correction factor is added to the measured SP before Rwe is computed. Since the correction equation was derived for fresh (Rwe$\approx$3.3) water the process was repeated for two more data sets, one for brackish and one for salt water.

Correlation of beds in the brackish zone of the Oscar was more difficult due to geologic variability and only one control well (with known Rwe) found in 32-1N-3W. As a result only 32 observations could be used to fit a curve. These were thick formations as were the fresh water zones. The plot of SP vs. RMF75 for the data and SP = -70 log (Rmf 75/ 0.42) is shown on Figure 18. When the curves were subtracted the resultant curves were within experimental error of the SPCOR2 correction factor for fresh water. Thus the author believes that the SPCOR2 correction factor can be used with confidence down to at least 7000 TDS for the Oscar.

Salt zones in the Oscar with sufficient observations could not be found. To examine the applicability of the SPCOR2 correction factor in salty water an upper Hoxbar (Pennsylvanian age) zone from Sec. 21,22,27,28 1S-3W was used. Figure 19 shows the 38 observations used. Obviously the scatter was much worse here. Four other areas in the county were examined with less data (not shown) and the same scatter existed. The Rwe was not known but it was estimated

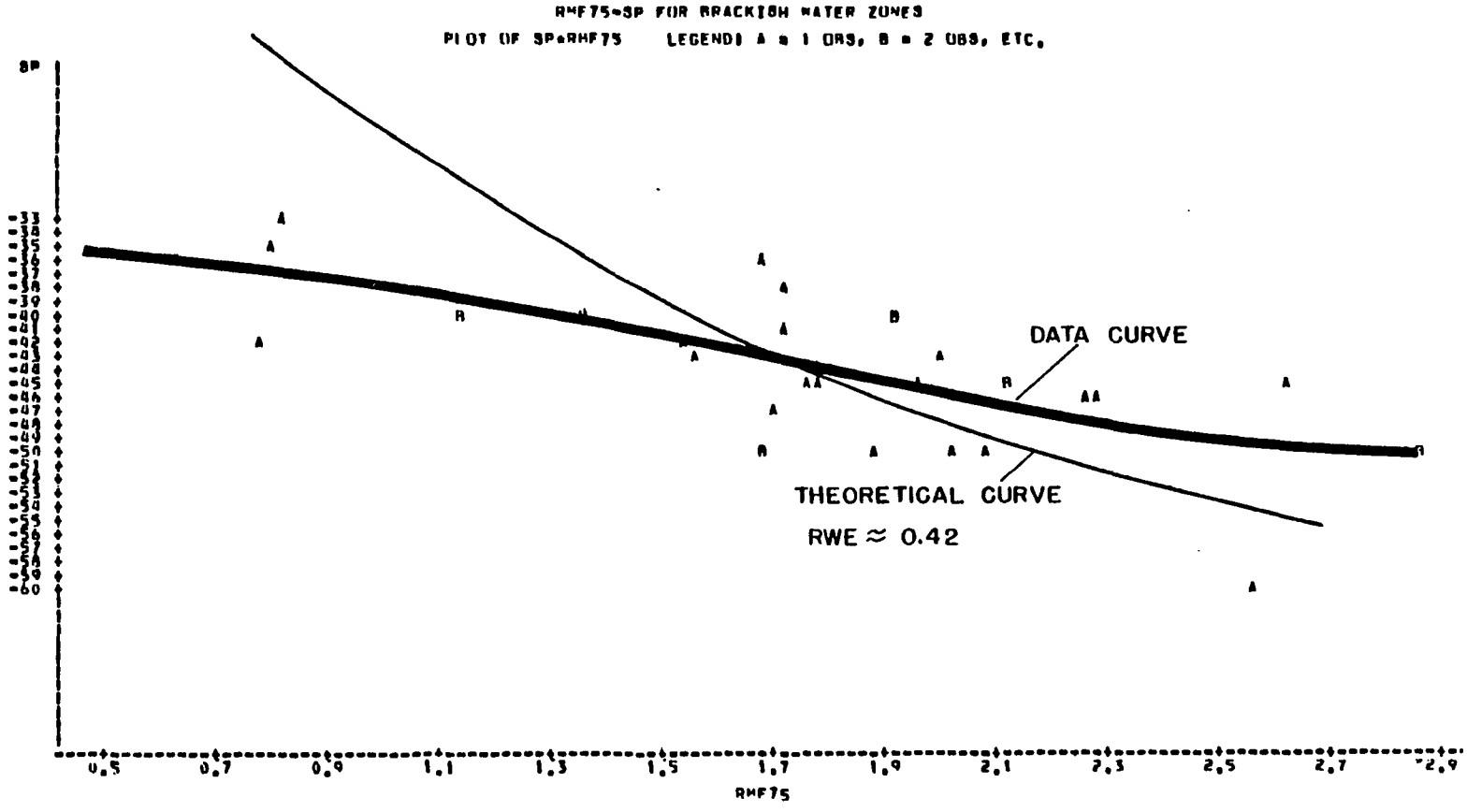


Figure 18. RMF75 vs SP for Brackish Water

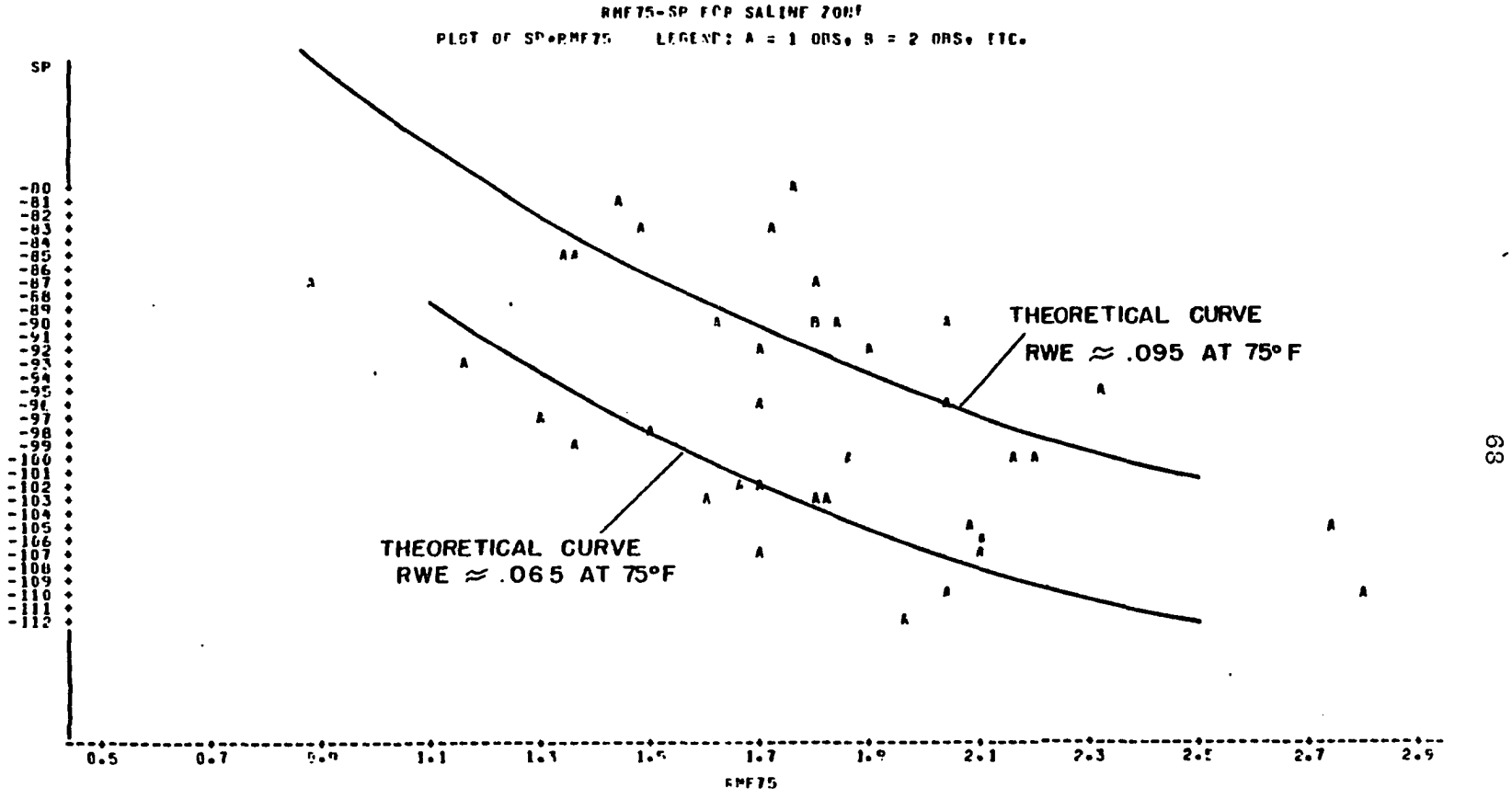


Figure 19. RMF75 vs SP for Salt Water

that the data represents two zones with different water--one at 0.095Ωm at 75°F and one at .065. The theoretical curves for SP = -72 log (RMF75/0.095) and SP = -72 log (RMF75/0.065) are plotted on the figure. It appears that the SPCOR correction factor would not be applied to such salty water. As the water becomes salty the greatest voltage drop would be in the mud unless the mud was very salty.

6. Computer Program

A fortran language computer program incorporating well data and correction factors is presented in Figure 20. The program is divided into several sections.

1) Oscar Rw and TDS Data

Garber-Wellington Rw and TDS Data

This data is the Rwe-Rw curve and the Rw-TDS curve for both formations.

2) Read Well Data and Print Headings

Read format and heading print format for the well data. Each well had a location card, a log heading card and several formation cards containing SP, thickness, etc. It also converts a location code to legal location and computes the temperature gradient.

3) SP Bed Thickness Correction - SP to SSP

These are the bed thickness equations of Dresser Atlas.

4) SP Correction for Resistivity of Mud Filtrate.

This is the empirical correction factor derived by the author which combines bore hole environmental corrections and the Rmfe-Rmf relation.

5) Rwe Computation

This portion solves the theoretical equation Rwe = RMF75/($10^{-(SP/k)}$), checks the formation code and picks the proper Rw and TDS.

6) Write Results

This contains the various print formats. The Rw is given at $75^{o}F$ and at the computed temperature.

7. Field Testing

Several tests were run on the computer to test the reproducibility and accuracy of the computer program. Groups of logs were correlated, the SP's measured, and Rmf's and Tmf's recorded. The TDS's of the waters were then calculated. The tests were run around known TDS's and also around zones which were not known. Figure 16 represents four of the largest and best controlled tests and includes both clay base and oil emulsion muds. In all, thirteen different tests were run on beds from 300' to 3000'. Two of the tests were run in different counties to see the spatial variability. Some general remarks can be made concerning the error of the method.

(1) The magnitude of the correction factors was always the same in all tests in fresh water.

```
C
C                    TDS OF DEEP GROUNDWATER
C                          OF
C          CARTER AND EASTERN JEFFERSON COUNTIES, OKLAHOMA
C               BY SPONTANEOUS POTENTIAL MEASUREMENTS
C
C          CARY L. MCCONNELL -- UNIVERSITY OF OKLAHOMA -- 1981
C
      1       DIMENSION X(42),Y(42)
      2       DIMENSION Z(23),Q(23)
C
C                          OSCAR RW AND TDS DATA
C
      3        DATA X(1),X(2),X(3),X(4),X(5),X(6),X(7),X(8),X(9),X(10),X(11),
     1X(12),X(13),X(14),X(15),X(16),X(17),X(18),X(19),X(20),X(21)/
     1.105,.23,.36,.51,.68,.82,1.0,1.15,1.35,1.5,1.7,1.9,2.05,2.3,2.5,
     12.65,2.9,3.2,3.5,3.75,4.0/
      4        DATA X(22),X(23),X(24),X(25),X(26),X(27),X(28),X(29),X(30),X(31),
     1X(32),X(33),X(34),X(35),X(36),X(37),X(38),X(39),X(40),X(41),X(42)/
     14.2,4.6,4.9,5.3,5.5,5.8,6.3,6.7,7.2,7.7,8.2,8.8,10.0,10.8,11.8,13.0,
     114.0,17.0,19.0,22.0,27.0,34.0/
      5        DATA Y(1),Y(2),Y(3),Y(4),Y(5),Y(6),Y(7),Y(8),Y(9),Y(10),Y(11),
     1Y(12),Y(13),Y(14),Y(15),Y(16),Y(17),Y(18),Y(19),Y(20),Y(21)/
     182000.,30000.,18000.,12500.,9400.,7800.,6500.,5700.,4850.,4400.,
     13920.,3550.,3280.,2960.,2730.,2590.,2390.,2180.,1950.,1860.,1780./
      6        DATA Y(22),Y(23),Y(24),Y(25),Y(26),Y(27),Y(28),Y(29),Y(30),Y(31),
     1Y(32),Y(33),Y(34),Y(35),Y(36),Y(37),Y(38),Y(39),Y(40),Y(41),Y(42)/
     11690.,1540.,1460.,1350.,1300.,1150.,1090.,1010.,960.,900.,850.,
     1750.,660.,605.,585.,550.,450.,407.,357.,292.,238./
C
C                    GARBER-WELLINGTON RW AND TDS DATA
C
      7        DATA Z(1),Z(2),Z(3),Z(4),Z(5),Z(6),Z(7),Z(8),Z(9),Z(10),Z(11),
     -Z(12),Z(13),Z(14),Z(15),Z(16),Z(17),Z(18),Z(19),Z(20),Z(21),Z(22)/
     -.105,.23,.36,.51,.68,.82,1.0,1.15,1.35,1.65,1.95,2.3,2.8,3.5,
     -4.4,5.4,6.4,8.8,12.0,16.3,10.7,22.5/
      8        DATA Q(1),Q(2),Q(3),Q(4),Q(5),Q(6),Q(7),Q(8),Q(9),Q(10),Q(11),
     -Q(12),Q(13),Q(14),Q(15),Q(16),Q(17),Q(18),Q(19),Q(20),Q(21),Q(22)
     -/82000.,30000.,18000.,12500.,9400.,7800.,6200.,5400.,4600.,3750.
     -,3200.,2700.,2200.,1770.,1400.,1130.,960.,700.,500.,375.,330.,
     -270./
      9        INTEGER CODE
     10        REAL KBELEV,K
     11        CHARACTER NAKL * 61
     12        CHARACTER TWNLET * 1
     13        CHARACTER RANLET * 1
     14        CHARACTER COMENT * 26
     15        CHARACTER *2 LL1,LL2,LL3,LL4
     16        INTEGER WELLNO,DATUM,DATE,S,SECNO,TWNNO,RANNO
     17        POR=0.0
     18        N=302
     19        WRITE(6,4)
     20      4 FORMAT('1')
C
C                          READ WELL DATA AND PRINT HEADINGS
C
     21        DO200 I=1,1000
     22        READ(5,10)WELLNO,LL1,LL2,LL3,LL4,SECNO,TWNNO,TWNLET,RANNO,RANLET,
```

Figure 20. Computer Program

```
     -NAME
  10 FORMAT(I5,I2,I1,I1,I1,I5,I3,A1,I2,A1,A50)
     IF(WELLNO .EQ. -100) GO TO 999
     N=N+1
     READ(5,20)WELLNO,GLELEV,KBELEV,DATUM,DATE,RMF,TMF,TD,BHT,
    -CASING,TOPOS,BOTOS
  20 FORMAT(I5,F5.0,F5.0,I5,I5,F5.2,F5.0,F10.0,F5.0,F5.0,F5.0,F5.0)
     RMF75=RMF*((TMF+7)/82)
     GRAD=((BHT-63.5)*100)/TD
     IF(L1.EQ.0) GO TO 49
     GO TO (42,44,46,48),L1
  42 LL1='NE'
     GO TO 50
  44 LL1='NW'
     GO TO 50
  46 LL1='SW'
     GO TO 50
  48 LL1='SE'
  49 IF(L2.EQ.0) GO TO 59
  50 GO TO (52,54,56,58),L2
  52 LL2='NE'
     GO TO 60
  54 LL2='NW'
     GO TO 60
  56 LL2='SW'
     GO TO 60
  58 LL2='SE'
  59 IF(L3.EQ.0) GO TO 69
  60 GO TO (62,64,66,68),L3
  62 LL3='NE'
     GO TO 70
  64 LL3='NW'
     GO TO 70
  66 LL3='SW'
     GO TO 70
  68 LL3='SE'
  69 IF(L4.EQ.0) GO TO 79
  70 GO TO (72,74,76,78),L4
  72 LL4='NE'
     GO TO 79
  74 LL4='NW'
     GO TO 79
  76 LL4='SW'
     GO TO 79
  78 LL4='SE'
  79 IF(L1.EQ.0)LL1='  '
  80 IF(L2.EQ.0)LL2='  '
  81 IF(L3.EQ.0)LL3='  '
  82 IF(L4.EQ.0)LL4='  '
     WRITE(6,500)
 500 FORMAT(//1X,'WELL NUMBER',T23,'LOCATION',T39,'DATUM',T47,'DATE',T5
    -4,'RMF(75 F)',T66,'CASING',T77,'TD',T84,'TEMP GRADIENT(F/100FT)')
     WRITE(6,510)    N ,LL1,LL2,LL3,LL4,SECNO,TWNNO,TWNLET,RANNO,
    -RANLET,DATUM,DATE,RMF75,CASING,TD,GRAD
 510 FORMAT(/I5,I3,  T19,A2,T21,A2,T23,A2,T25,A2,T28,I2,I31,I1,I32,A1,
    -T34,I1,T36,A1,T40,I4,T47,I4,T56,F4.2,T67,F4.0,T75,F6.0,T93,F4.2/)
     WRITE(6,560)
 560 FORMAT(1X,'LABEL NO',T13,'FORM TOP',T24,'THICK',T32,'BOTTOM',T41,
    -'R DEEP',T50,'R SHAL',T59,'R MED',T67,'SP',T74,'SP(COR)',T84,
    -'POROSITY',T95,'RW(75)',T104,'RWFORM(TEMP F)'    ,T120,'TDS'/)
```

```
      DO 100 J=1,1000
   READ(5,30)LABEL,SP,TOP,THICK,POTTOM,RULKD,RDEEP,RSHAL,RMED,COMPAT
     -,CODE
30 FORMAT(1F,F5.0,F5.0,F5.0,F5.0,F5.0,F5.3,F5.1,F5.1,F5.1,A26,I1)
   SR=SP
   IF(LABEL .EQ.-10) GO TO 200
C
C                              CALCULATE   TDS
C
   POR =((2.65-RULKD)/1.65)*100
   TF=((TOP/10)*(RHT-63.5)+63.5
   RMF75=RMF*((TMF+7)/82)
   RMFSP=RMF75*(82/(TF+7))
   IF((THICK.LT.10).OR.(THICK.GT.50)) GO TO 109
   RIRM=RDEEP/RMFSP
C
C                              SP BED THICKNESS CORRECTION--PSP TO SSP
C
   IF((RIRM.LT.0.7).AND.(RIRM.GT.0.0)) GO TO 90
   IF((RIRM.LT.1.6).AND.(RIRM.GE.0.7)) GO TO 92
   IF((RIRM.LT.2.7).AND.(RIRM.GE.1.6)) GO TO 94
   IF((RIRM.LT.4.2).AND.(RIRM.GE.2.7)) GO TO 96
   IF((RIRM.LT.6.7).AND.(RIRM.GE.4.2)) GO TO 98
   IF((RIRM.LT.8.7).AND.(RIRM.GE.6.7)) GO TO 101
   IF((RIRM.LT.12.5).AND.(RIRM.GE.8.7)) GO TO 102
   IF((RIRM.LT.17.5).AND.(RIRM.GE.12.5)) GO TO 104
   IF(RIRM.GE.17.5) GO TO 106
90 SPCORF=1.2010340-0.0200858*THICK+0.0006618*(THICK**2)-
  10.0000065*(THICK**3)
   GO TO 107
92 SPCORF=1.3462370-0.0325012*THICK+0.0009623*(THICK**2)-
  10.0000090*(THICK**3)
   GO TO 107
94 SPCORF=1.4265440-0.0363159*THICK+0.0010023*(THICK**2)-
  10.0000089*(THICK**3)
   GO TO 107
96 SPCORF=1.5067280-0.0389862*THICK+0.0009966*(THICK**2)-
  10.0000084*(THICK**3)
   GO TO 107
98 SPCORF=1.6630850-0.0491029*THICK+0.0012379*(THICK**2)-
  10.0000105*(THICK**3)
   GO TO 107
101 SPCORF=1.8129000-0.0615387*THICK+0.0016441*(THICK**2)-
  10.0000148*(THICK**3)
   GO TO 107
102 SPCORF=1.9855950-0.0764160*THICK+0.0021000*(THICK**2)-
  10.0000194*(THICK**3)
   GO TO 107
104 SPCORF=2.1250000-0.0854492*THICK+0.0023222*(THICK**2)-
  10.0000213*(THICK**3)
   GO TO 107
106 SPCORF=2.3312980-0.102127*THICK+0.0027800*(THICK**2)-
  10.0000254*(THICK**3)
107 IF (SPCORF .LT. 1) SPCORF = 1
   SP=SP*SPCORF
109 SP1=SP
C
C                              SP CORRECTION FOR RESISTIVITY OF MUD FILTRATE
C
   IF(SP.GT.25) GO TO 111
```

```
      SPCOR2=25.16324866-1.14722601*RMF75-14.06071511*(RMF75**2)
     -+3.067904S6*(RMF7F**3)
      GO TO 112
  111 SPCOR2 = 0
  112 IF(RMF75.GT.2.5) SPCOR2=-6
      SSP=SP1*SPCOR2
C
C                              RWE COMPUTATION
C
      K=60.+.133*TF
      RATIO=10.**(-SSP/K)
      RWE=RMF75/RATIO
      JRWE=(RWE/0.1)+0.5
      RWE2=JRWE*0.1
      L=RWE2*10
      IF(CODE.EQ.1) GO TO 120
      IF((L.LT.1).OR.(L.GT.42)) GO TO 130
      RW75=X(L)
      TDS=Y(L)
      GO TO 135
  120 IF((L.LT.1).OR. (L.GT.22)) GO TO 130
      R.75=Z(L)
      TOS=Q(L)
      GO TO 135
  130 RW75=0.0
      TDS=0.0
  135 RWFORM=RW75*(82./(TF+7.))
C
C                              WRITE RESULTS
C
      IF((POR.GT.100).AND.(L.LT.1)) GO TO 2000
      IF(CODE.EQ.1) GO TO 201
      IF((POR.GT.100).AND.(L.GT.42)) GO TO 3000
      GO TO 300
  201 IF((POR.GT.100).AND.(L.GT.22)) GO TO 3000
  300 IF(POR.GT.100) GO TO 4000
      IF(L.LT.1) GO TO 5000
      IF(CODE.EQ.1) GO TO 400
      IF(L.GT.42) GO TO 6000
      GO TO 501
  400 IF(L.GT.22) GO TO 6000
  501 WRITE(6,1001)LABEL,TOP,THICK,BOTTOM,RDEEP,RSHAL,RMED,SB,SSP,POR,
     -RW75,RWFORM,TF,TDS
 1001 FORMAT(1X,T5,I2,T15,F5.0,T25,F4.0,T33,F5.0,T42,F4.0,T50,F4.0,T59,
     -F4.0,T67,F4.0,T76,F4.0,THE,F4.1,T96,F4.1,T107,F5.1,'(',F4.0,')',
     -T119,F6.0)
      GO TO 100
 2000 WRITE(6,2002)LABEL,TOP,THICK,BOTTOM,RDEEP,RSHAL,RMED,SB,SSP
 2002 FORMAT(1X,T5,I2,T15,F5.0,T25,F4.0,T33,F5.0,T42,F4.0,T50,F4.0,T59,
     -F4.0,T67,F4.0,T76,F4.0,TRP,'-',T95,'SALINE',T107,'SALINE',T119,
     -'>82000')
      GO TO 100
 3000 WRITE(6,3003)LABEL,TOP,THICK,BOTTOM,RDEEP,RSHAL,RMED,SB,SSP
 3003 FORMAT(1X,T5,I2,T15,F5.0,T25,F4.0,T33,F5.0,T42,F4.0,T50,F4.0,T59,
     -F4.0,T67,F4.0,T76,F4.0,TRP,'-',T97,'FRESH',T109,'FRESH',T120,
     -'FRESH')
      GO TO 100
 4000 WRITE(6,4004)LABEL,TOP,THICK,BOTTOM,RDEEP,RSHAL,RMED,SB,SSP,
     -RW75,RWFORM,TF,TDS
 4004 FORMAT(1X,T5,I2,T15,F5.0,T25,F4.0,T33,F5.0,T42,F4.0,T50,F4.0,T59,
```

```
     -F4.0,T67,F4.0,T76,F4.0,T88,'-',T96,F4.1,T107,F5.1,'(',F4.0,')',
     -T119,F6.0)
      GO TO 100
5000 WRITE(6,5005)LABEL,TOP,THICK,BOTTOM,RDEEP,RSHAL,RMED,SB,SSP,POR
5005 FORMAT(1X,T5,I2,T15,F5.0,T25,F4.0,T33,F5.0,T42,F4.0,T50,F4.0,T59,
     -F4.0,T67,F4.0,T76,F4.1,T95,'SALINE',T107,'SALINE',T119,
     -'>82000')
      GO TO 100
6000 WRITE(6,6006)LABEL,TOP,THICK,BOTTOM,RDEEP,RSHAL,RMED,SB,SSP,POR
6006 FORMAT(1X,T5,I2,T15,F5.0,T25,F4.0,T33,F5.0,T42,F4.0,T50,F4.0,T59,
     -F4.0,T67,F4.0,T76,F4.0,T86,F4.1,T97,'FRESH',T109,'FRESH',T120,
     -'FRESH')
  100    CONTINUE
  200 CONTINUE
  999 WRITE(6,600)
  600 FORMAT('1')
      STOP
      END

$EXEC
```

(2) Brackish water also gave the same reuslts in every test; however the base of the Oscar where this water occurs is quite variable geologically and difficult to correlate on logs.

(3) Correlation of the well logs for tests must be very accurately done by someone with considerable experience, as water salinities changed rapidly with depth in some places.

(4) Typically, in each test $\approx$ 15% of the data would be obviously no good. Usually this was due either to shale in the sandstones which reduces the SP quite drastically, or to bad data on the log headings.

(5) For reproducibility one should use either the Rm to Rmf charts for the great majority of the data or measured RMF's for the great majority. If one method is used to derive the correction factors then the data set to be computed should be done the same way. For this study mostly old logs were used and the charts were the main source of Rmf's.

(6) Because of the $\approx$ 15% bad data a large mass of data is required. Editing was done as the program was being developed and as the maps were being prepared. One hundred two wells were thrown out of the data set amounting to $\approx$ 13% of the total data. A study of this type requires overcollecting the data and discarding rather than trying to stretch meager data.

Table 5 shows two of the tests before and after applying the correction factors derived by the author. The bed thickness correction commonly used in oil field work was applied to all the tests both before and after. It had little effect on the correction. The Rwe for all three tests was $\approx$ 3.3 or a TDS of about 700-800 mg/l. The mean and standard deviation of all tests before and after correcting is 966, 470 and 801, 198 respectively.

TABLE 5

TDS VERSUS RMF@75 BEFORE AND AFTER CORRECTION

Test 1

1-5S-2W ≈ 700-800 TDS

RMF75	TDS mg/l without SP Correction	TDS mg/l with SP Correction
0.95	1090	1090
0.98	2180	900
0.99	1860	850
1.06	1540	605
1.08	1300	960
1.14	1860	1010
1.20	1780	960
1.22	1780	900
1.34	1200	680
1.38	1460	900
1.42	1090	680
1.47	900	550
1.48	850	458
1.54	960	680
1.70	750	1300
1.73	850	750
1.80	407	407
1.83	550	585
1.95	458	585
2.07	357	585

Test 2

14-2S-3W ≈ 700-800 TDS

1.08	1540	750
1.46	1090	850
1.58	1010	850
1.59	1300	960
1.62	960	750
1.71	850	680
1.76	1010	960
1.79	850	850
1.80	850	850
1.81	1010	1010
1.83	605	605
1.88	1010	1090

TABLE 5 (continued)

RMF75	TDS mg/l without SP Correction	TDS mg/l with SP Correction
1.95	850	960
1.97	750	960
2.04	850	1010
2.04	585	750
2.15	585	850
2.20	850	1090
2.23	550	850
2.29	Fresh	550
2.29	680	680
2.32	550	850
2.42	Fresh	458
2.52	605	605

SECTION V

HYDRAULICS AND WATER QUALITY

1. Hydraulics

The results of the program are arranged in township and range order and listed in the Appendix. Four maps were made; 1) base of the fresh water at 1000 TDS, 2) base of the fresh water at 7000 TDS, 3) isopach of the fresh water less than 1000 TDS and 4) isopach of the fresh water between 1000 and 7000 TDS. None of the maps include the surface water (150 feet to 200 feet throughout the area).

The base of the formation with a TDS closest to but less than 1000 TDS and the base of the formation with a TDS closest to but less than 7000 TDS were picked as control for the base of the fresh water maps. The detailed maps with a scale of 1 inch to the mile are found in the pocket on the inside of the back cover. These are condensed to a much larger scale in Figures 21 and 22 for easy reference. Figure 22 represents the depth to which surface casing should be set in the study area under present Oklahoma laws. The detailed

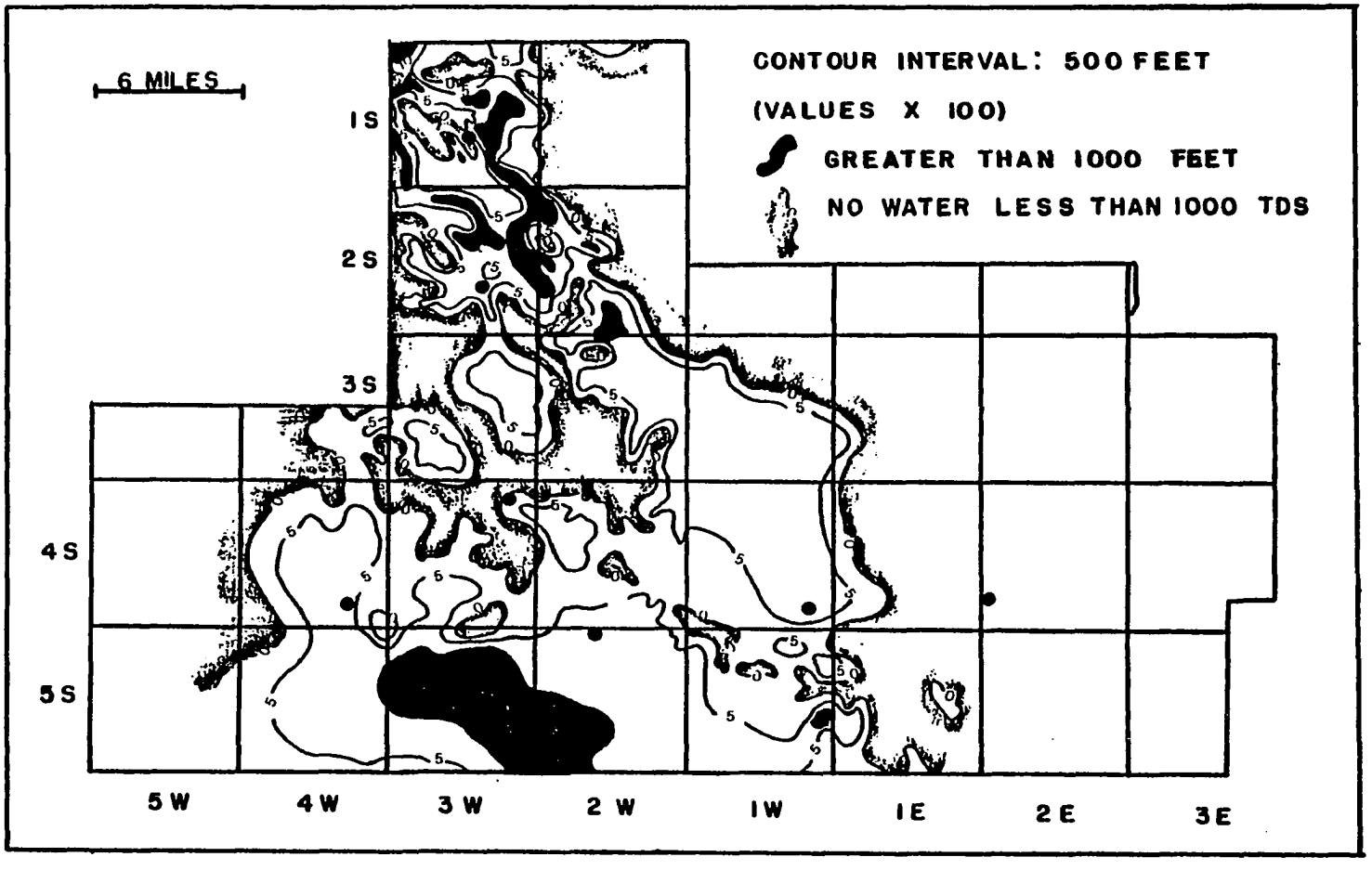


Figure 21. Depth to the Base of Water with a TDS of $\leq$ 1000

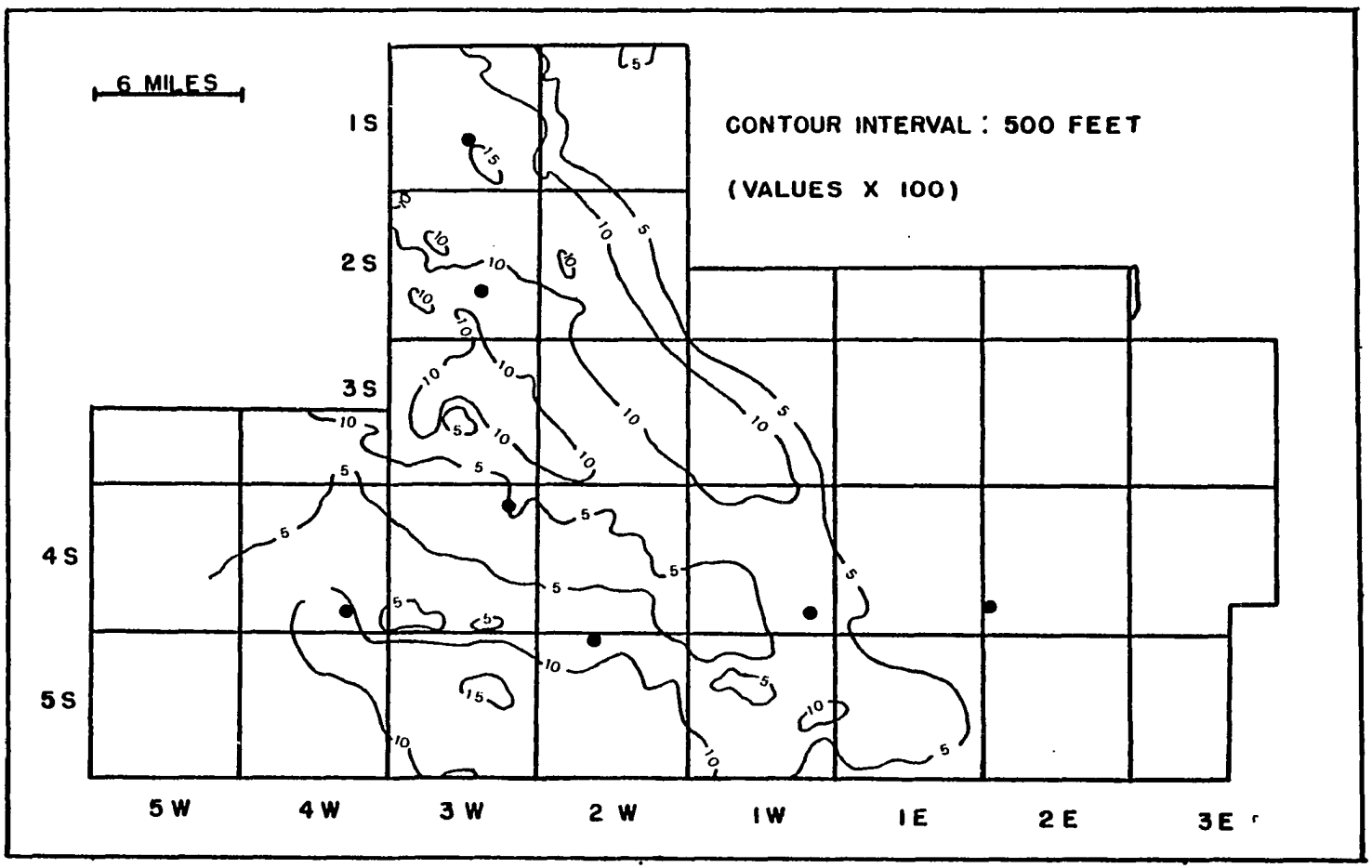


Figure 22. Depth to the Base of Water with a TDS of $\leq$ 7000

maps include only the parts of the county in which the Oscar is a viable aquifer. The thickness of the formations with less than 1000 TDS (potable water) and the thickness of the formations with TDS's of from 1000 to 7000 TDS (industrial or agricultural water) were found and used as control for the isopach maps in the pocket and in Figures 23 and 24. Only the maps in the pocket should be used to locate a value.

To compute in place reserves of the water the total pore volume of the reservoir must be known (i.e., pore volume = formation volume x porosity). The pore volume was computed for both less than 1000 TDS and 1000 to 7000 TDS by planimetering the contour lines and applying the pyramidal formula. (55) There are 22.4×10^6 AcFt of aquifer with less than 1000 TDS and 53.7×10^6 AcFt of aquifer with a TDS of 1000-7000.

The porosity was computed from density readings in 79 different beds through the study area. By equating the bulk density readings from nuclear well logs to the density of the beds and their contained fluids the following is obtained;

$$\rho_b = \phi\rho_f + (1 - \phi)\rho_{ma}$$

where: ρ_b = bulk density

ϕ = porosity

ρ_f = density of the fluid = 1.0 for water of less than 7000 TDS

ρ_{ma} = density of the rock (assumed to be 2.65)

Solving for ϕ, the porosity is then equal to $(\rho_b - 2.65)/$

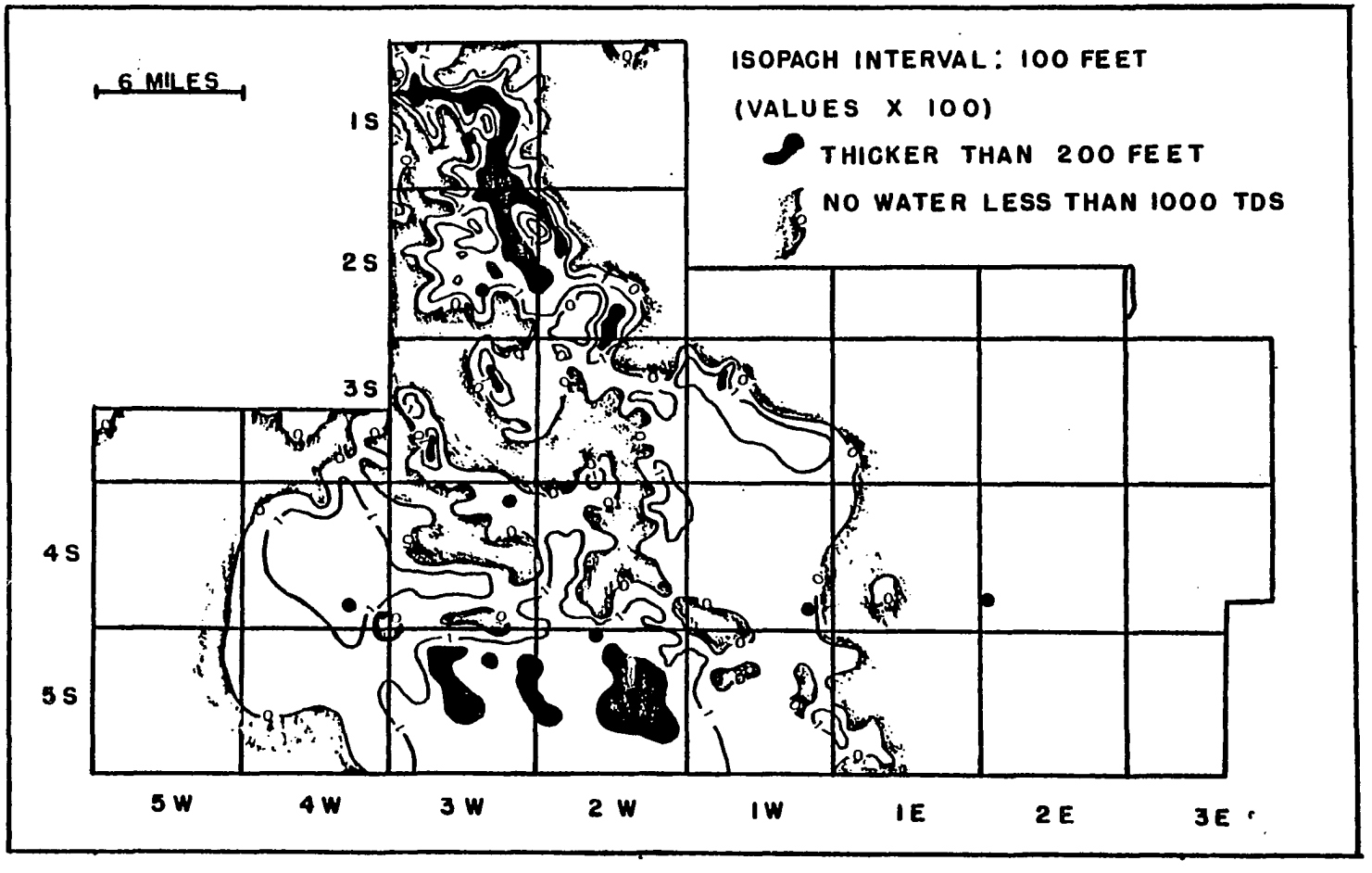


Figure 23. Isopach of Water with a TDS of $\leq$ 1000

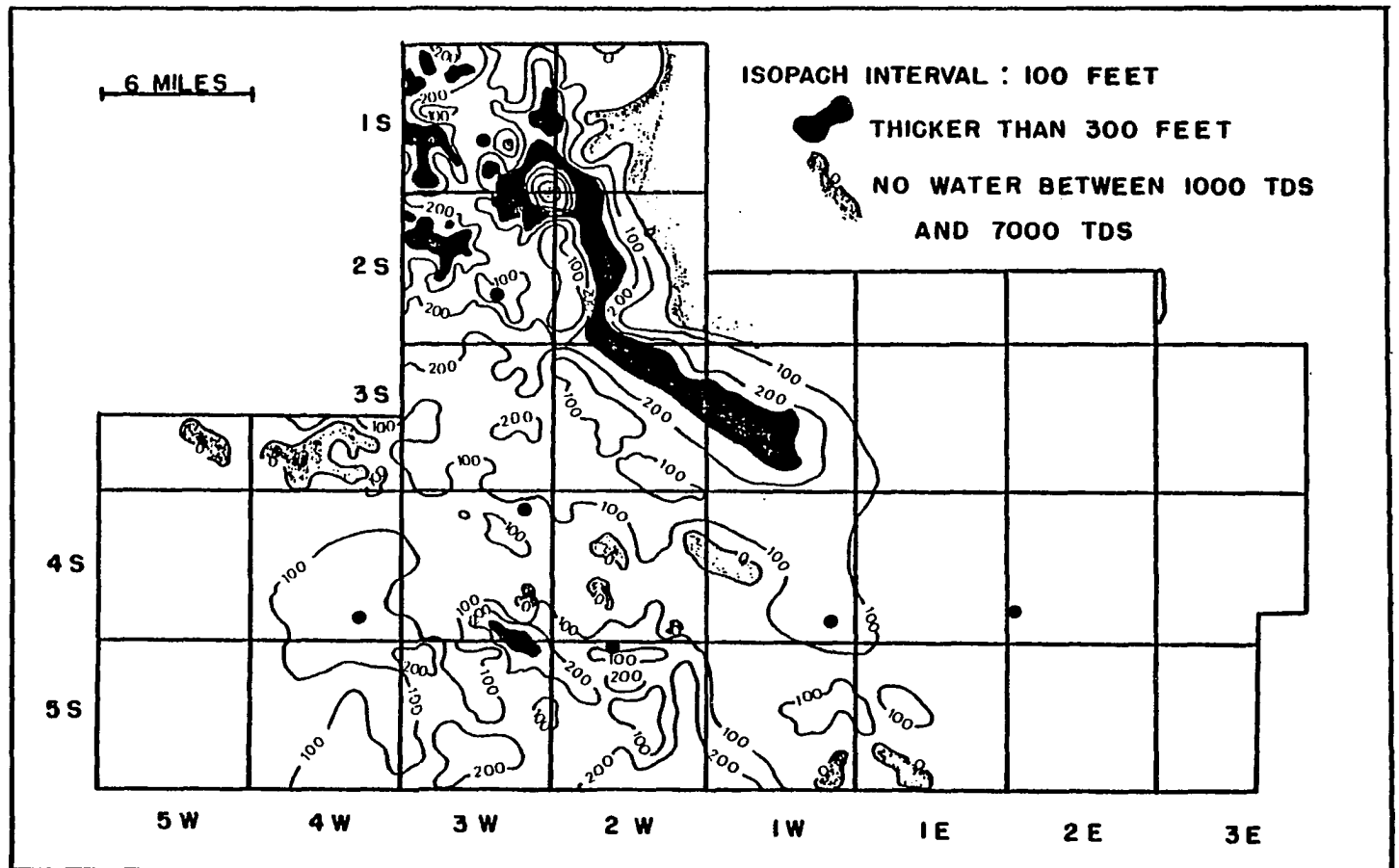


Figure 24. Isopach of Water with a TDS of 1000-7000

(-1.65). This was incorporated into the computer program and results of individual beds are found in the data in the Appendix. The average porosity is 26.1% with a standard deviation of 2.58. It is the author's experience that the Oscar porosity is quite consistent, usually decreasing only where the beds are shaley. The pore volume of the study area is summarized below.

	less than 1000 TDS	1000-7000 TDS
Bulk volume	22.4×10^6 AcFt	53.7×10^6 AcFt
porosity	26.1%	26.1%
Pore volume	5.85×10^6 AcFt	14.02×10^6 AcFt
Recoverable Water (@ 40% (56))	2.34×10^6 AcFt	5.61×10^6 AcFt

The flow capacity of the aquifer can be found by combining the Darcy and continuity equations into an unsteady state partial differential equation. Bouwer (57) gives this equation as;

$$\frac{1}{r}\frac{\partial h}{\partial r} + \frac{\partial^2 h}{\partial r^2} = \frac{S}{T}\frac{\partial h}{\partial t}$$

where: r = radius T = transmissivity

h = head t = time

S = storage coefficient

Inherent in the linearization of this equation are the assumptions of a homogeneous, isotropic aquifer with a fully penetrating well.

S and T are used to predict well performance and spacing (etc.). In more recent years, they must be known

for solving finite difference equations in unsteady state computer models. The solution to the differential equation yields an infinite series which is approximated in tables. The solution is expressed as drawdown (s), where $s = H-h$; H being the initial head of the aquifer. The solution also requires that Q, the flow rate, be constant.

$$s = \frac{Q}{4\pi T}\left[-0.577216 - \ln u + u - \frac{u^2}{2.2!} + \frac{u^3}{3.3!} \cdots\right]$$

where: $u = \frac{r^2 S}{4Tt}$

The expression in brackets is usually called the well function, (W(u)). A more rigorous derivation of the above can be found using the theory of sources and sinks in the complex plane.

Several well test methods are available to find S and T, most of which require more complete data than was available in the study area. In all, nine pumping tests were located in the study area; eight in the Ardmore well field at Newport and one near Fox. Six of the eight tests in the Ardmore Field had Q's which varied more than 10% and were omitted. The test near Fox had a very high formation (skin) damage and could not be used. By the time the well was clear the Q was changed and the test was discarded.

Figure 25 is a plot of the two remaining tests. Using the method of Chow (58) the following is obtained. Because of the somewhat poor data the solutions are not unique but

rather represent an averaged value.

Ardmore Well #3

(Q = 215 GPM, within 10%)

$F(u) = S/\Delta S = 200/33 = 6.1$

$u = 10^{-7}$ and $W(u) = 15.5$

Then solving for T and S yields;

$T = 255\ ft^2/d = 1907\ GPD/ft$

$S = 2.1 \times 10^{-4}$

Thickness = 154 ft.

K (hydraulic conductivity) = 1.66 ft/d

Ardmore Well #5

(Q = 170 GPM, within 10%)

$F(u) = S/\Delta S = 200/33 = 6.1$

$u = 10^{-7}$ and $W(u) = 15.5$

and;

$T = 255\ ft^2/d = 1907\ GPD/ft$

$S = 8.6 \times 10^{-5}$

Thickness - 136 ft.

K = 1.8 ft/d

Thus the average T = 1900 GPD/ft and $S = 1.5 \times 10^{-4}$. This compares with three cores of shallow zones of the Oscar and Permian of Carter and Stephens Counties (59,60) of 13.63 ft/d, 1.97 ft/d and 3.087 ft/d (i.e., 5 darcies, 0.72 darcies and 1.13 darcies). A reasonable value of K would be about 2.1 ft/d and T and S would thus be;

$T \approx 300\ ft^2/d$ and $S \approx 1.5 \times 10^{-4}$

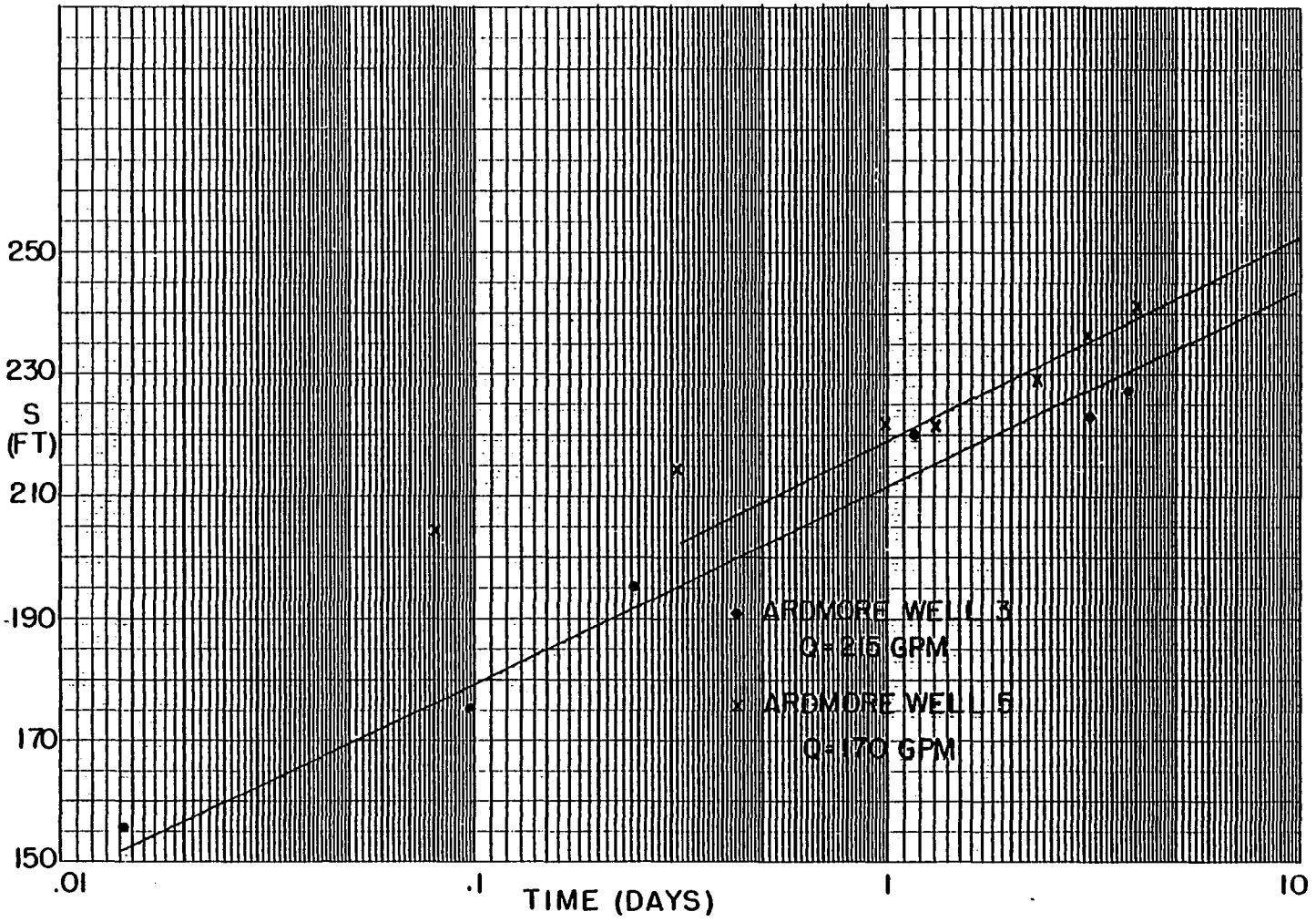


Figure 25. Well Tests

This kind of low hydraulic conductivity is typical of Pennsylvanian rocks in southern Oklahoma.

2. Chemical Quality

The chemical quality of the Oscar drinking water is very poor in parts of the area. The best water comes from beds which are on the down sides of faults or in synclines. The Garber-Wellington of the southern part of the county has the best quality. The poorest water comes from large anticlinal structures. Table 6 is a recent listing of water chemistry from municipal water wells (from Water Resources Board). (61)

All of the analyses exceed the Health Department recommended limits for TDS except for Lone Grove and Ringling. Usually Ringling's is higher than 600 TDS, making Wilson's and Lone Grove's water the best quality in the area. Lone Grove, which is the only town in the area taking water entirely from the Garber-Wellington, always has the best quality groundwater in terms of TDS but is quite hard. Heavy metals or coliform in the deep aquifers have not been reported.

TABLE 6

CHEMICAL QUALITY

Parameters	Healdton	Lone Grove	Ratliff City	Wilson*	Western Carter	Ringling
Total hard (mg/l)	23.4	281	106	53	7	7
Total alk (mg/l)	565	297	503	373	506	494
CL (mg/l)	197	28	27	16	18	19
SO_4 (mg/l)	70	79	161	72	61	127
F (mg/l)	2.7	0.35	1.6	0.75	1.2	1.6
TDS (mg/l)	1159	451	840	526	652	781
pH	8.7	7.5	8.6	8.7	9	9.1
Na (mg/l)	250	43	270	173	240	261
NasNO_3 (mg/l)	0.3	0.2	0.1	.1	0.1	0.1
Fe (µg/l)	140	450	250	-	200	100
Mn (µg/l)	20	40	20	-	20	10
Ag (µg/l)	2	2	2	-	2	3
Cd (µg/l)	1	1	1	-	1	1
Cr (µg/l)	115	5	5	-	5	8
Cu (µg/l)	6	31	26	-	8	5
Pb (µg/l)	5	16	11	-	5	7
Zn (µg/l)	39	31	6	-	16	6
Ba (µg/l)	100	100	160	-	100	100
As (µg/l)	1	1	4	-	1	1
Se (µg/l)	ND	1	1	-	1	1
Hg (µg/l)	0.5	0.5	0.5	-	0.5	0.5
Radioactivity*						
ALPHA (PCI/L)	4.14	6.12				
BETA (PCI/L)	12.14	4.95				
RADIUM (PCI/L)	0.23	0.72				

*Average of four samples--Oklahoma State Department of Health

SECTION IV

POLLUTION POTENTIAL OF MUNICIPAL WATER SUPPLIES

1. Sources of Pollution

To protect each municipality's ground water supply from pollution the physical configuration of the reservoirs and avenues of fluid movement must be known. Because of the present industrial development the only real threat to the water supplies is from the oil industry. Section 3-114 of the 1980 Corporation Commission rules sets out a mechanism for protecting municipal water supplies.

To determine sources of pollution to the Oscar an historical perspective must be used. Technology and laws have changed drastically over the years, the results of which are just beginning to be realized now. Since this is a mature oil province most development will be injection wells, disposal wells or in-field production wells. Salt water or chemical injection wells, because they increase the bottom hole pressure, are of the greatest concern.

Under the present laws, for salt water to enter a fresh water stratum an injection well would have to have both a tubing and a casing leak. Such a leak would be detectable by state inspectors by testing the annulus pressure. However, since there are over 1200 injection wells in Carter County and one Corporation Commission inspector for the county, such leaks may exist. Injection wells, when properly completed (as required by Oklahoma law) with casing cemented to the surface and an inner string of tubing with packers cannot contribute significant pollution to the fresh water. This was not the case in the past when only casing was used. Injection well leaks before 1972 were probably quite common.

Two other potential sources of pollution from well bores include producing wells in which the fresh water is not completely covered with surface casing and abandoned wells which have not been properly plugged. There are hundreds of these types of wells in Carter County. Producing wells have a long string of casing in them and many have tubing within the casing. Communication between pressurized saltwater zones behind the free pipe and fresh water zones is possible although the region behind the pipe is filled with heavy mud lowering the likelihood that this can happen. The new Commission rules make this practice illegal.

Abandoned wells are typically very old, and poor completions were common in the early days of oil exploration.

Many wells in the old fields were plugged with a very short plug at the surface and contain little or no surface pipe. When such abandoned wells are located near injection wells, as is the case in some of the older fields, there is great potential for contamination of the fresh water.

In the early days of oil production little care was taken in protection of fresh water supplies. The author believes that the majority of the pollution we see in Carter County today is the result of these past practices such as allowing salt water runoff, evaporation ponds and leaking casing. Many of the old producing fields have salinity gradients which have brackish water at the top, then a normal fresh to salt water gradient below rather than the usual gradient of fresh water at the surface down to salt water at depth. One particularly notable example is shown on Figures 26 and 27. Figure 26 is a contour map of a shallow TDS anomaly in which TDS's of 4,000 to 18,000 are found above waters of 2,000-4,000 TDS. Figure 27 is an isopach map of porous beds with TDS's of over 4,000 (above fresher water) in the same area. This area is part of the Giant Sho-vel-tum oil field of Stephens and Carter Counties. The town of Ratliff City is on the edge of this anomaly.

To determine if the salinity has changed significantly since the mid 50's the TDS's of the same zones were examined in close together wells with logs run in different decades. This was done in 7-1S-2W, 10-1S-3W, 18-1S-3W, 33-1S-3W,

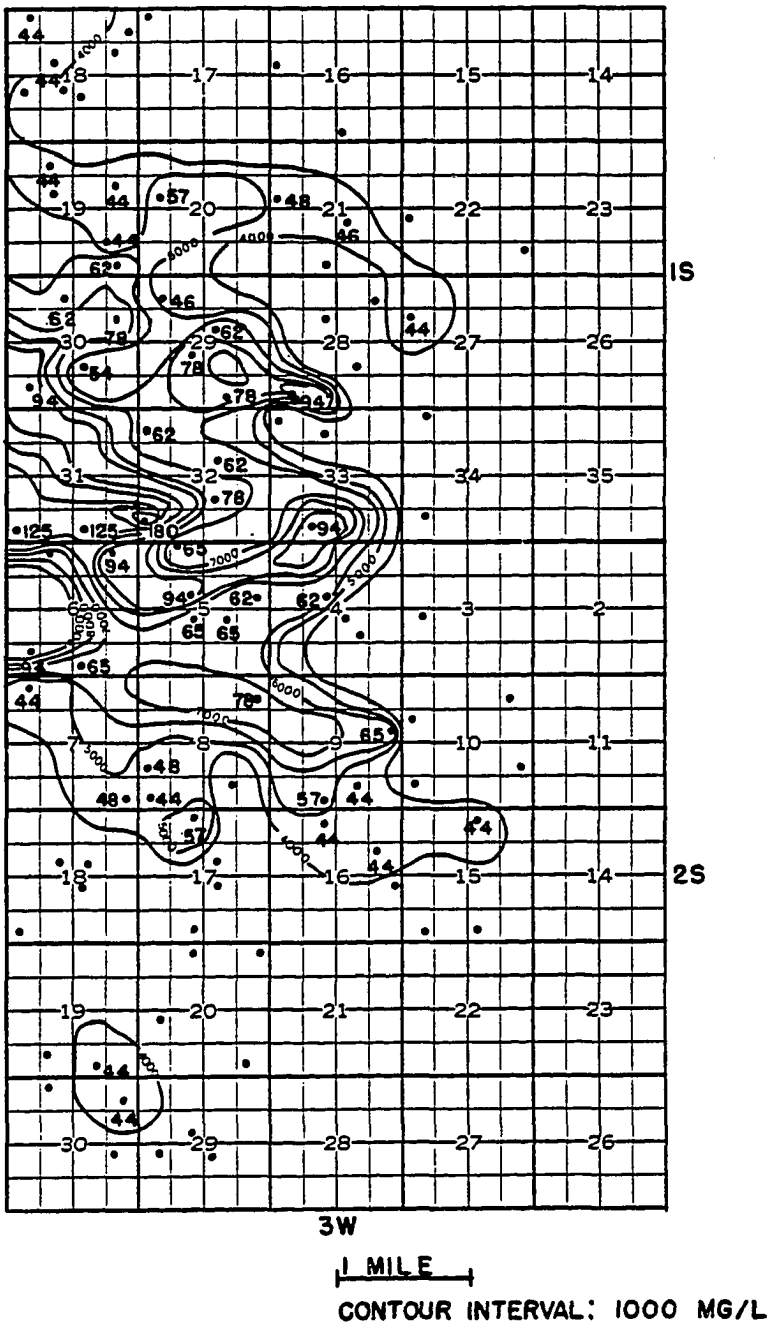


Figure 26. Contour Map of a TDS Anomaly

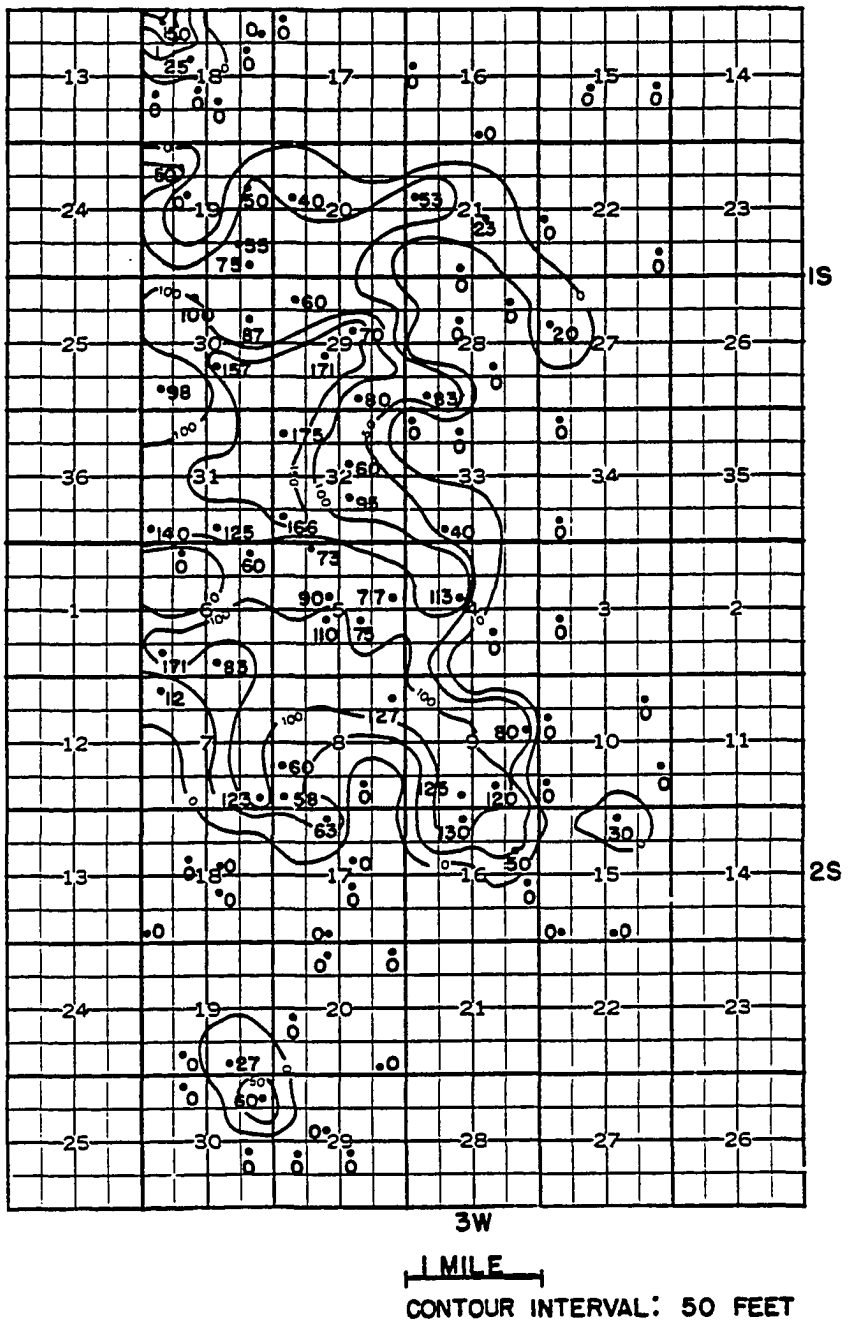


Figure 27. Isopach Map of the TDS Anomaly

23-3S-4W and 36-3S-4W. In all areas there were no significant changes in salinity over the last 30 years. In 23-3S-4W TDS's in similar zones from seven wells with logs from 1955 to 1980 were computed and are shown below.

Date	55	55	57	60	61	80	80
TDS	960	1090	750	1010	1010	960	1010

The TDS has been essentially constant here since 1955. This further indicates that most salt water polluting occurred early in the history of the Carter County oil development.

2. Resources and Pollution Potential of Local Reservoirs

Each of the municipalities using the Oscar or Garber-Wellington ground water was studied to outline the resources and pollution potential of the local reservoirs so they can be protected.

Ringling

The town of Ringling has five wells which average 600-700 TDS all in Section 26-T4S-R4W. All wells are in the Oscar and the town sits on a broad flat outcrop area of the Oscar. There has been very little oil well drilling in the area and no injection wells are present. Figure 28 locates the city wells in relation to the oil wells. If surface casing of future oil wells in the Ringling area is set according to the base of the 7000 TDS fresh water map

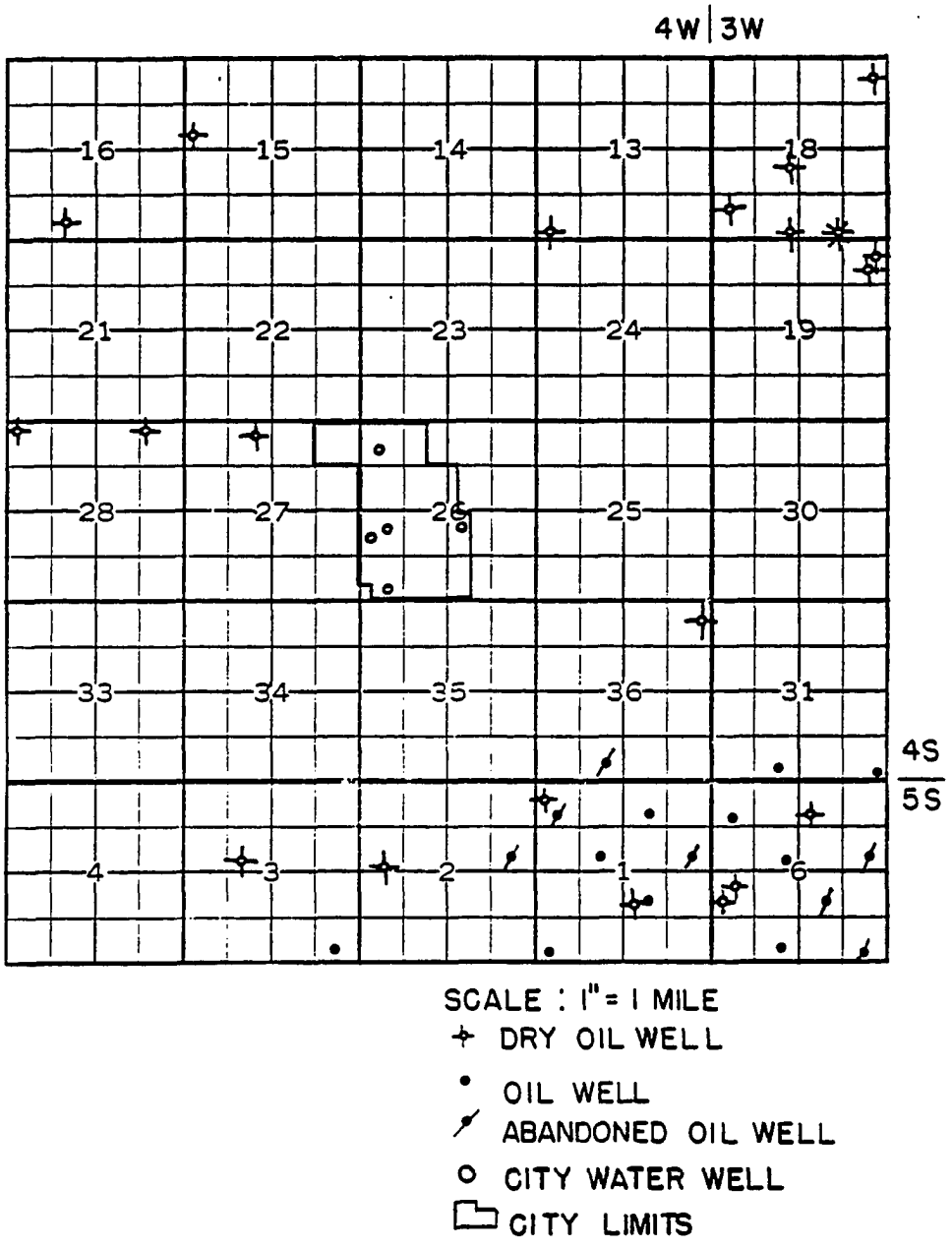


Figure 28. Ringling City Wells

presented in the study, the water wells should be safe.

Wilson

The town of Wilson has good and plentiful water. The wells are all in beds off the south flank of the Healdton oil field and oil wells are sparse in the area. There are no injection wells near the present city wells. Wilson has four wells in Section 32-T4S-R2W and 6-T4S-R2W. The well in Section 6 and one of the wells in Section 32 are the main producers. Most of the water is from the Oscar, although one well is comingled with the Garber and has much harder water. Figure 29 is a location plat around Wilson. Figure 30 is a detailed isopach map of fresh water zones open in the city wells (i.e., water with a TDS of $\approx$ 500). There is much new drilling in the area and the surface casing should be set quite deep (see the base of 7000 TDS map in the pocket).

Lone Grove

Lone Grove is located in a depression in the basin which was filled with Garber-Wellington and the Garber was preserved from subsequent erosion. Lone Grove's water all comes from the Garber which is quite thick here (see Figure 9). The town has four wells, all in Section 25-T4S-R1W. All four wells are very low in TDS (all $\approx$ 500 mg/l) but high in hardness. The average hardness of the four in 1/80 was 255 mg/l as $CaCO_3$. It is this preponderance of Ca^{++} and Mg^{++} ions which makes the Garber water look saltier on well

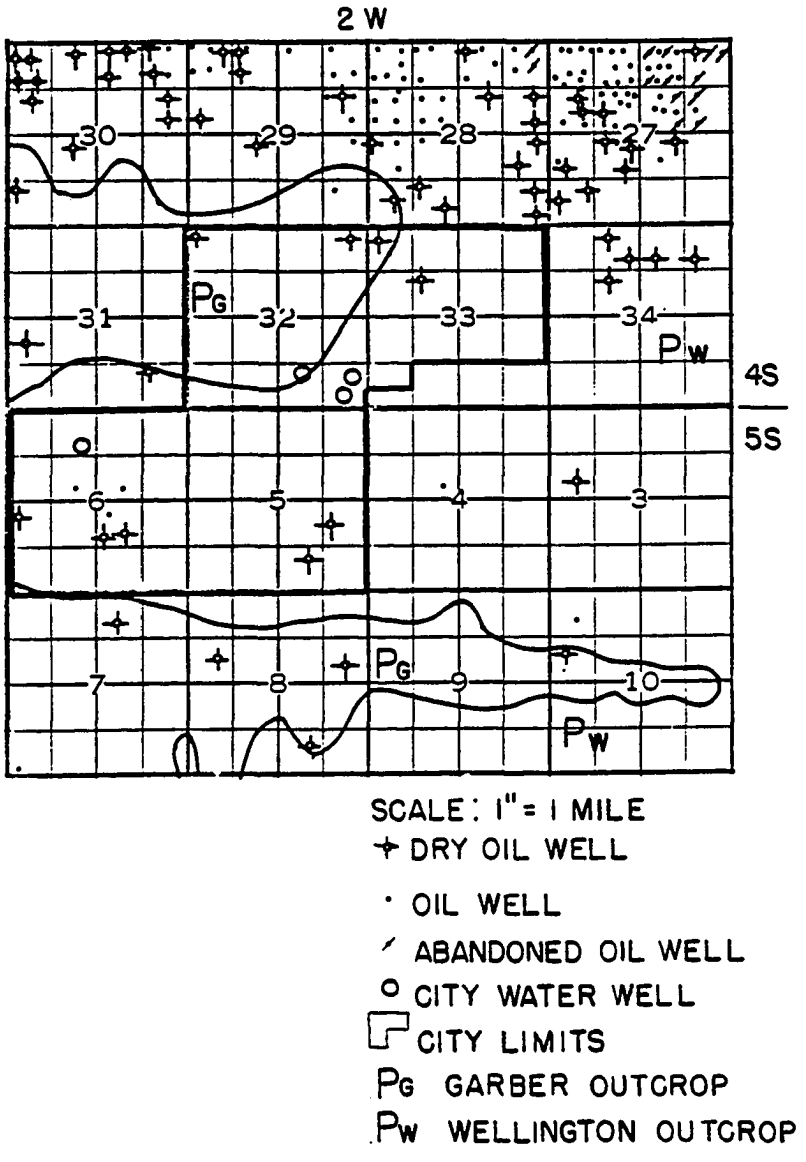


Figure 29. Wilson City Wells

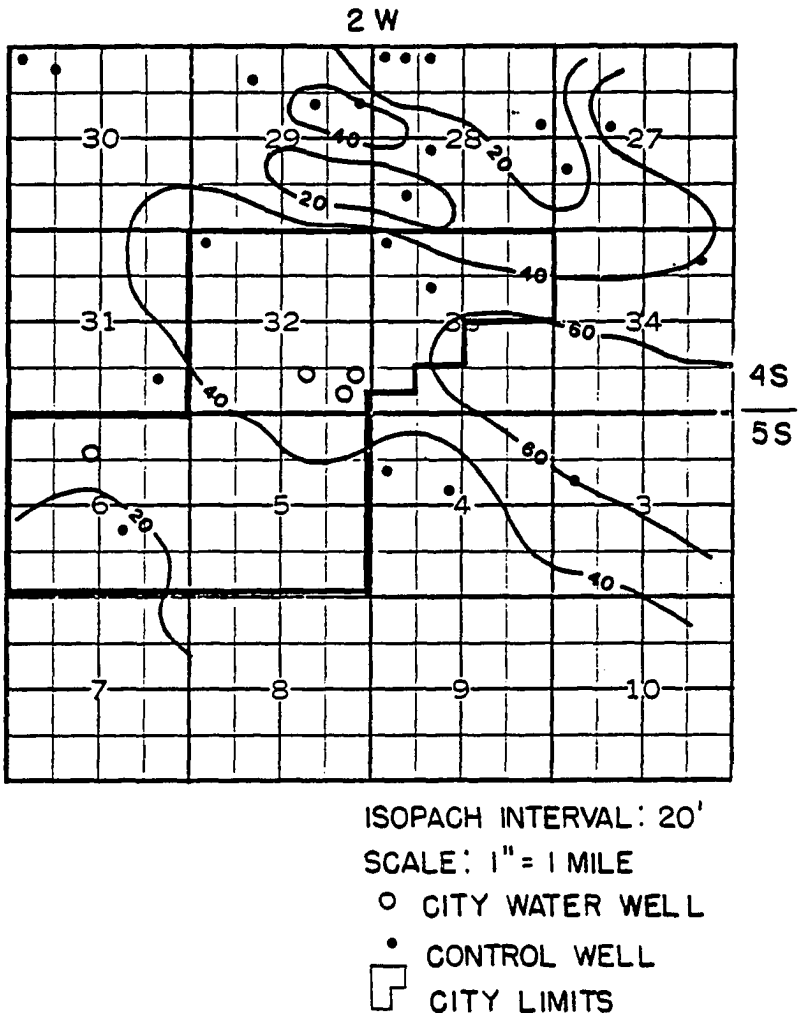


Figure 30. Isopach of Fresh Water Around Wilson

logs than the surrounding wells. Figure 31 shows the sparse oil well activity around the town. No injection wells are located near the water wells. It is unlikely that the area around Lone Grove will see much oil well drilling in the foreseeable future.

Ardmore

The largest and best designed well field in the area belongs to the city of Ardmore and is located near Newport (see Figure 2). Ardmore now uses surface water and the wells are all shut in, being used for emergency water only. The field has eight wells which are spread out in five sections (Sections 34, 35, 36-T3S-R1W and Sections 1, 2-T4S-R1W). They were all completed in 1956, however Well 2 was never used. This area overlies a fairly deep part of the basin and is well removed from oil well drilling or industrial pollution. All the wells were tested once in 1957 and again in 1963. The pumping tests were run for finding cost per million gallons produced rather than for the hydraulic constants storage coefficient (S) and transmissivity (T), so the flow rate was not held constant. The operating cost increased from $22.86/MMG in 1957 to $36.68/MMG in 1963. This increasing cost was a main factor in switching to surface water. The quality of the water is good although quite soft. The TDS of the water is about 513 mg/l and the hardness about 33 mg/l as $CaCO_3$. Figure 32 shows the location of the wells.

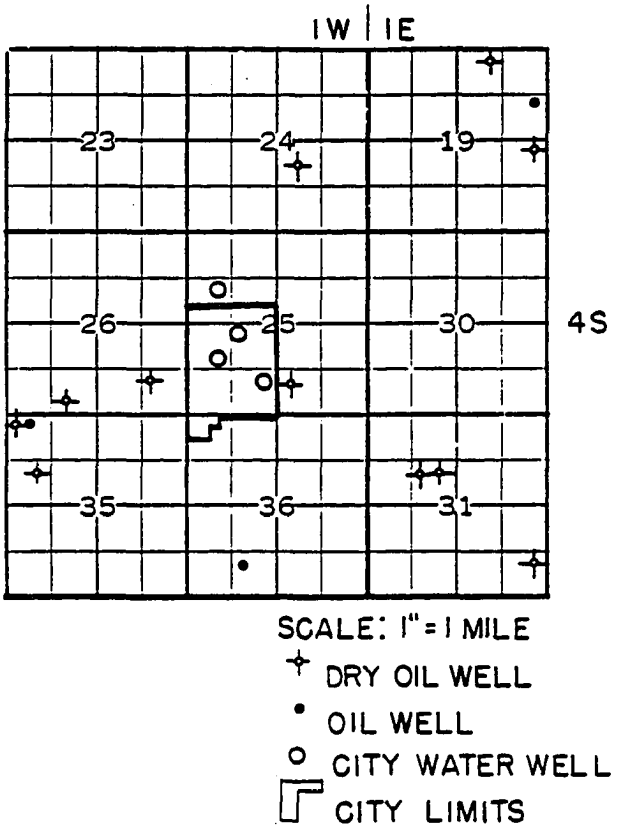


Figure 31. Lone Grove City Wells

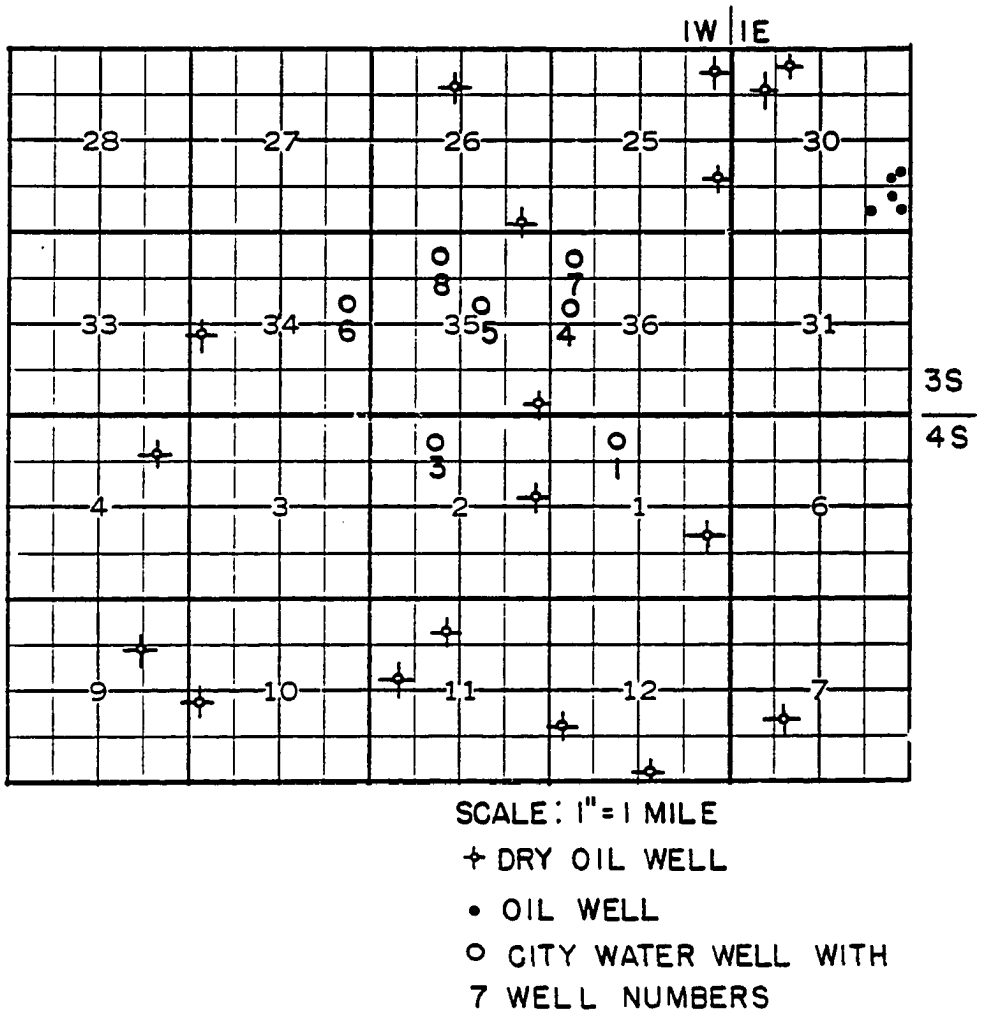


Figure 32. Ardmore City Wells

Ratliff City

Ratliff City is located in the heart of "oil country." The city wells are drilled adjacent to oil wells. Figure 33 is the location plat for the town. The water has a high TDS (800-900 mg/l) and the sodium is between 250 and 300 mg/l. It is located on the edge of very poor water with much better water to the east. The water in Section 27 is deep and of good quality according to the computer computations. This water could be a large potential resource (Figure 34).

There are two wells in use now. A third was drilled but a gas zone was perforated by accident and the well was ruined. The town has plans to convert to surface water in the future. Well 2 in the SWNWNE of Section 28 is the main well and produces out of both the Garber and the Oscar. To the west and north of town there is a reversal in salinity gradient in the shallow beds. This is the salinity anomaly shown in Figure 26.

Figure 33 shows only the wells drilled more recently than about 1950. There are many very old wells drilled mostly in 1924 and 1925 all through Section 28. These wells, some of which are adjacent to the city water wells, were drilled by cable tool and most have little cement behind what pipe is left in the holes. At present there are no injection wells in the N/2 of Section 28, but two are found in the S/2 and they are in nearly all offsetting sections. If injection wells were to be used in the N/2 of 28 the city

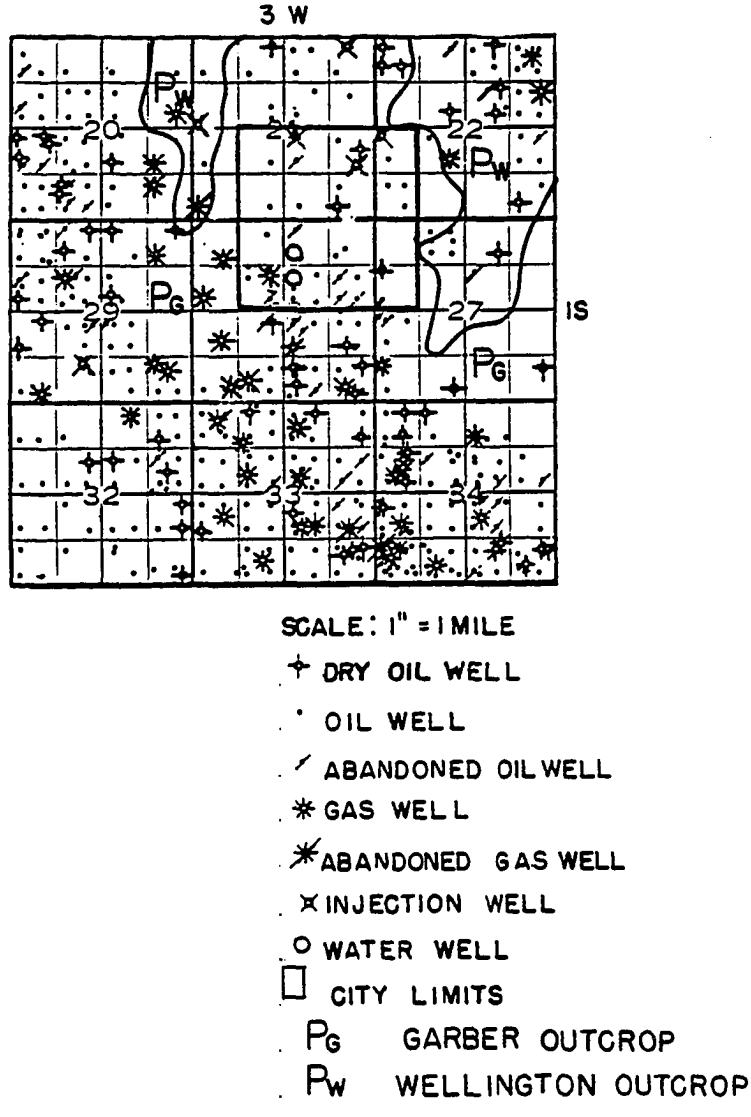


Figure 33. Ratliff City Wells

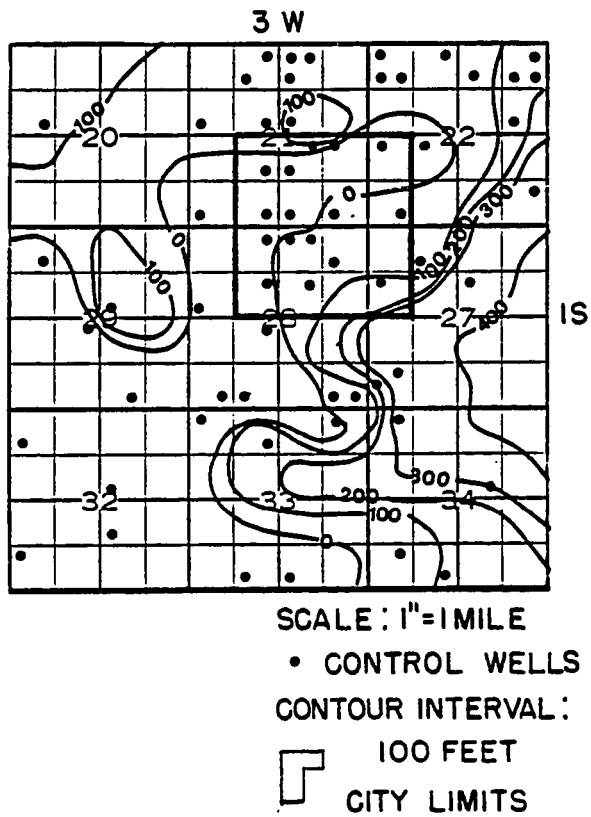


Figure 34. Isopach of Fresh Water Around Ratliff City

wells would be in high danger of being contaminated. The town would probably need to use Section 3-114 of the 1980 Commission Rules (see page 19) to take extraordinary precautions against such contamination.

Healdton

Healdton presently has seven wells, two of which are shut in and the rest operating. Most of the wells have very low productivity with the exception of the Shrader #1 (SW SW SW 36-T3S-R3W) and the Mobil Well (29-T3S-R3W) which have flow rates of ≈ 130 gpm and ≈ 80 gpm respectively. The town started using surface water in 1979 but still uses the wells to supplement the water supply. When all the wells (before using surface water) were in use the water had very poor quality. The total TDS was near 1000 mg/l and the sodium was 250-500 mg/l. This high sodium content was one of the reasons for the change to surface water. The water was very soft and had a strong salt taste. Use of bottled water was common in the town. The soft groundwater and hard surface water mixes now to make good quality water.

The town had nine wells in 1978. The following chloride analyses were run on the wells in that year;

Well	1	2	3	4	5	6	7	8	9
Chlorides (PPM)	49	45	55	231	270	50	78	44	371

Well 9 was abandoned and Well 5 was shut in to improve the sodium and TDS. The wells are shown on Figure 35. Healdton

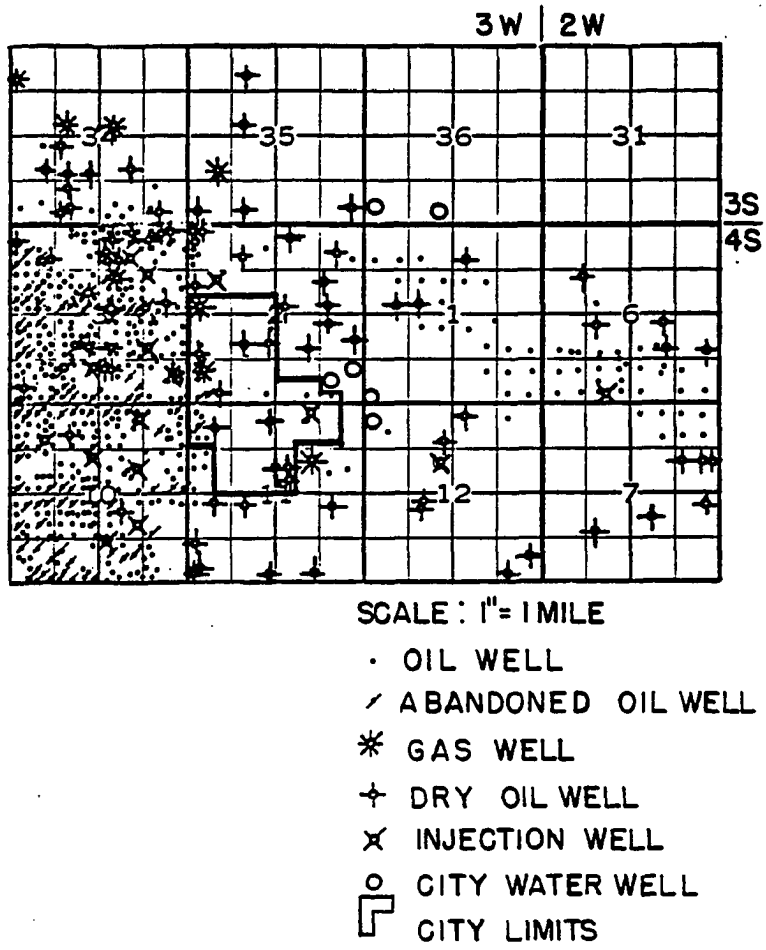


Figure 35. Healdton City Wells

is on the east flank of the giant Healdton oil field which is under secondary recovery and contains numerous injection wells and old poorly cased abandoned holes. Off the structure the water becomes potable. Figure 36 is an isopach of the potable water near the town. The area of Sections 1, 6, 7 and 12 contains a large volume of good water and protecting this should be of paramount concern to the town.

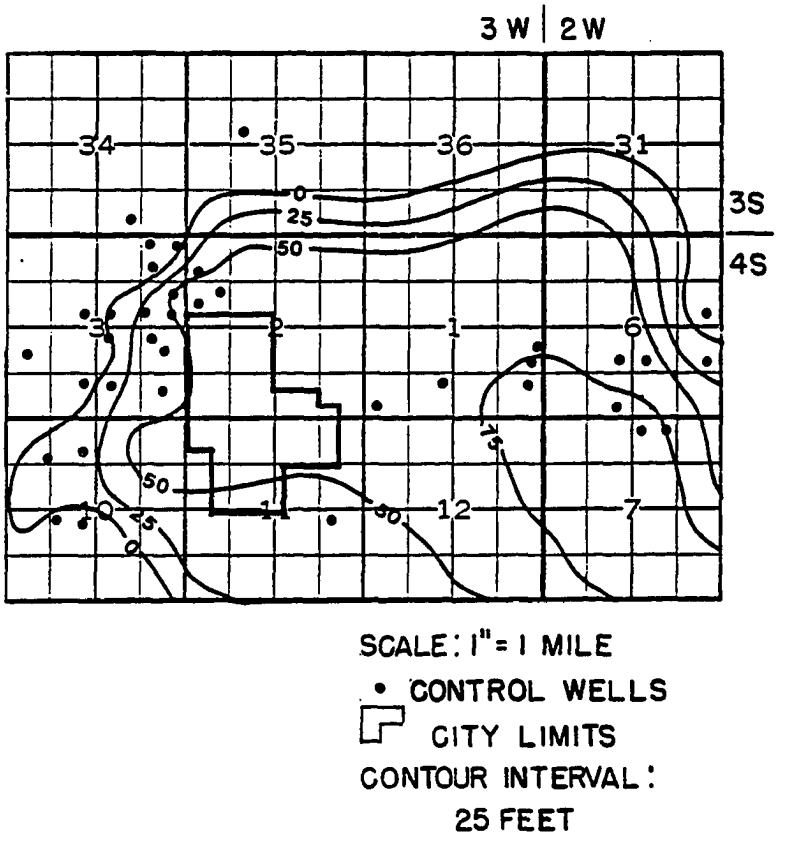


Figure 36. Isopach of Fresh Water Around Healdton

SECTION VII

RESULTS AND CONCLUSIONS

1. Results

The TDS of fresh waters of the Oscar Group and Garber-Wellington formation of Eastern Jefferson and Carter Counties was computed using spontaneous potential measurements from well logs. Over 700 well logs were used in a computer program which makes corrections to the raw data and determines total dissolved solids for both aquifers. The hydraulics of the Oscar and the pollution potential to towns using the water were also studied. Specifically the results are as follows.

1. Two groundwater formations are present in the study area; the Oscar Group and the Garber Sandstone. The average porosity of the aquifers was 26.1% as measured by density logs.

2. The water chemistry was different for the two formations with the Garber having relatively more Ca^{++} and Mg^{++} per Na^{+} than the Oscar. Rwe-Rw curves were developed for both from over 31 chemical analyses.

3. The borehole environmental corrections and the Rmfe-Rmf relationship were determined empirically by examining a large number of logs around known chemistry water zones. Using a known Rwe (Rwe $\approx$ 3.3 Ωm) and setting Rmfe = Rmf @ 75°F the equation SP = -(60 + 1.33(T)) log (RMF75/Rwe) was plotted with RMF75 on the abscissa and SP on the ordinate. Actual well data with beds thick enough that the existing bed thickness corrections were not necessary was plotted with SP vs. RMF75 and a curve was fit. The separation of the two curves represents the combined borehole correction and the Rmfe-Rmf relationship.

The borehole environmental correction factor was greater for salty muds than predicted by earlier electric analog models. Further, this correction is largely independent of bed thickness between 12 and 25 feet thick which is the normal thickness of these formations. At an Rmf @ 75°F of 1.8 Ωm the borehole correction was no longer needed as the voltage drop in the borehole dominated and only the usual thin bed corrections were needed. The Rmfe-Rmf relationship was found using the same curves. Below 1.8 Ωm Rmfe= Rmf, above 1.8 Ωm Rmf varied from Rmfe. At Rmf @ 75°F greater than 2.1 Ωm the Rmfe-Rmf relationship was close to Rmfe = 0.85 Rmf.

4. A computer program was developed which used the above corrections and the computed TDS for each formation. The output is listed in the Appendix. Using the program

with the derived borehole and Rwe-Rw corrections proved to give more reliable results than the previously published equations. Testing the program on fresh water zones in 44 wells with a known Rwe of $\approx 3.3\,\Omega m$ (TDS 700-800 mg/l) reduced the computed average TDS from 966 mg/l to 801 mg/l and reduced the standard deviation from 470 mg/l to 198 mg/l. The previously published borehole environmental correction factors were applied to both cases.

5. Four maps were developed from the computer output; (1) base of 1000 TDS water, (2) base of 7000 TDS water, (3) isopach of the less than 1000 TDS water zones, and (4) isopach of the 1000-7000 TDS water zones. The base of 7000 TDS represents the depth to which surface casing should be set according to the present Oklahoma Corporation Commission rules. The less than 1000 TDS and the 1000-7000 TDS isopach maps were used in conjunction with porosity measurements from density logs to compute fresh water pore volumes. These are 5.85×10^6 AcFt of less than 1000 TDS water and 14.02×10^6 AcFt of 1000-7000 TDS water in place in the study area. If a recovery factor of 40% is applied as suggested by the Oklahoma Water Resources Board then there is 2.34×10^6 AcFt of less than 1000 TDS and 5.61×10^6 AcFt of 1000-7000 TDS recoverable water in the study area.

6. The transmissivity and storage coefficient was estimated from well tests in the Ardmore city well field. They are 300 $ft^3/d/ft$ and 1.5×10^{-4} respectively.

2. Conclusions and Recommendations for Further Study

There is a wealth of information on groundwater which can be obtained from oil well logs under highly controlled conditions. Without the necessary controls the error in estimating salinity can be very high. The present commonly accepted correction factors were investigated in the range of Rmf @ 75°F of 0.75 Ωm to 2.5 Ωm. Below 1.8 Ωm the voltage drop was too great in the formation to give accurate results. Empirical corrections can be used to correct for this effect. Above 1.8 Ωm the Rmf began to deviate from Rmfe. The Rwe-Rw relationships were examined and found to vary from formation to formation and for the Garber from township to township within the formation.

Mapping the distribution and base of both potable and industrial water will help the state agencies and oil companies plan for enhanced oil recovery operations in the future. The author defined industrial water as water with a TDS of 1000 to 7000 mg/l. Water less than 10,000 TDS is termed treatable water by the Environmental Protection Agency. If treatable water is eventually disallowed for enhanced oil recovery then little fresh water will be available in Carter County for polymer flooding. There is an abrupt increase in salinity below the Oscar.

The spontaneous potential can also be used to locate salt water polluted shallow water zones. One such area was

discussed. The author concluded that most salt water pollution occurred prior to the use of disposal wells. There has been little detectable saltwater pollution since.

This study should have some impact on this very serious problem of the conflict between the need for water for energy and for domestic and agricultural uses. This problem may become acute in 10-15 years. Many aspects of this are yet to be investigated. The most urgent are listed below.

1. All aquifers in Oklahoma need to have Rwe-Rw curves developed for them. These can be used for both setting surface casing and for evaluating the reserves of different salinity waters. This will be imperative in regions of the state where enhanced oil recovery operations will be undertaken.

2. The borehole and Rmfe-Rmf relationship needs to be investigated in other locations in the state. The Rmfe-Rmf relation can vary depending on the type of makeup water used. The borehole correction needs to be determined empirically in other areas with large amounts of data, but also digital computer models of specific aquifer profiles need to be developed. These models would use more realistic adjacent bed resistivities (Rs) surrounding the aquifers than in the earlier electric log models.

3. During the study the author found considerable chemical data about the aquifers which the state agencies did not have on file. A central data bank needs to be

developed for storage of essential information.

4. The state needs to implement a statewide aquifer by aquifer well testing program to determine transmissivity and storage coefficients (T and S) of each aquifer. Where the T varies over a particular aquifer this needs to be known so that finite difference or finite element models can be designed. These models should encompass linear and non-linear solutions and both leaky and nonleaky models.

5. Studies need to be carried out in all aquifers to determine recharge rates.

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APPENDIX

COMPUTER DATA

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
1	NENWNW 3 1S 2W	884	1052	1.87	90.	1705.	1.67

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	300.	10.	310.	30.	30.	0.	9.	9.	-	5.3	5.8(69.)	1350.
2	367.	40.	478.	40.	32.	0.	7.	5.	-	4.6	4.9(70.)	1540.
3	520.	10.	530.	10.	32.	0.	-27.	-29.	-	1.0	1.0(72.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
2	NWSWSW 4 1S 2W	0	454	1.30	60.	2059.	1.43

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	47.	350.	60.	35.	0.	-1.	7.	-	2.6	3.0(66.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
3	NWNENW 4 1S 2W	886	1255	1.00	194.	2313.	1.45

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	228.	30.	275.	55.	35.	0.	20.	34.	-	8.2	9.1(67.)	900.
2	460.	25.	485.	150.	100.	0.	-32.	-22.	-	0.7	0.7(70.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
4	NWSWNW 6 1S 2W	901	872	1.20	253.	4750.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	423.	38.	475.	8.	10.	0.	-15.	-5.	-	1.5	1.6(68.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
5	NENWSW 6 1S 2W	913	554	2.25	133.	2641.	1.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	70.	280.	50.	37.	0.	-4.	-9.	-	2.6	3.0(65.)	2590.
2	298.	42.	340.	50.	30.	0.	-1.	-6.	-	3.2	3.5(67.)	2180.
3	473.	14.	487.	13.	15.	0.	-20.	-25.	-	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
6	SWNENE 7 1S 2W	0	754	1.99	80.	3005.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	100.	240.	75.	45.	0.	-16.	-18.	-	1.5	1.7(65.)	4400.

2	305.	30.	390.	20.	25.	0.	-30.	-32.	-	1.0	1.1(68.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
7	SWSESE 7 1S 2W	0	855	1.93	100.	2986.	1.36

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	30.	220.	50.	50.	0.	-13.	-15.	-	1.7	1.9(66.)	3920.
2	270.	27.	315.	40.	40.	0.	-1.	-3.	-	3.2	3.5(67.)	2180.
3	390.	60.	522.	30.	30.	0.	-20.	-22.	-	1.4	1.5(69.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
8	NWSESE 7 1S 2W	0	771	2.13	130.	3252.	1.37

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	52.	240.	60.	35.	0.	-10.	-14.	-	2.1	2.3(66.)	3280.
2	390.	25.	440.	30.	25.	0.	-20.	-24.	-	1.5	1.6(69.)	4400.
3	450.	20.	470.	17.	17.	0.	-24.	-28.	-	1.1	1.2(70.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
9	SWSESW 7 1S 2W	919	564	1.29	102.	4137.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	130.	410.	27.	25.	0.	-15.	-6.	-	1.5	1.7(66.)	4400.
2	470.	68.	570.	25.	25.	0.	-7.	2.	-	2.1	2.2(69.)	3280.
3	600.	43.	700.	20.	20.	0.	-11.	-2.	-	1.7	1.8(71.)	3920.
4	750.	17.	767.	15.	20.	0.	-27.	-19.	-	1.0	1.0(72.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
10	SWSWNW 7 1S 2W	986	1160	1.91	136.	4749.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	15.	205.	60.	34.	0.	13.	13.	-	7.7	8.6(66.)	960.
2	305.	35.	360.	35.	20.	0.	-1.	-2.	-	3.2	3.5(68.)	2180.
3	380.	72.	480.	60.	35.	0.	-19.	-20.	-	1.5	1.5(69.)	4400.
4	500.	100.	700.	50.	37.	0.	-10.	-11.	-	2.1	2.2(70.)	3280.
5	750.	40.	800.	12.	17.	0.	-35.	-37.	-	0.8	0.8(73.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
11	SESESESE 17 1S 2W	0	668	2.34	107.	3251.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	60.	290.	100.	100.	0.	-8.	-13.	-	2.5	2.8(66.)	2730.
2	325.	25.	350.	25.	25.	0.	-21.	-26.	-	1.5	1.6(68.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
12	NENESW 17 1S 2W	0	757	2.36	132.	2888.	0.95

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	158.	32.	190.	35.	35.	0.	-28.	-33.	-	1.1	1.3(65.)	5400.
2	250.	38.	320.	45.	45.	0.	-13.	-18.	-	2.1	2.3(66.)	3280.
3	417.	16.	423.	40.	20.	0.	-33.	-39.	-	0.8	0.9(67.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
13	NWNWNW 17 1S 2W	962	655	1.50	110.	2890.	1.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	20.	160.	52.	52.	0.	-3.	2.	-	5.4	6.1(65.)	1130.
2	205.	40.	270.	50.	50.	0.	8.	13.	-	4.6	5.2(66.)	1540.
3	320.	53.	417.	25.	25.	0.	-13.	-8.	-	1.5	1.7(67.)	4400.
4	457.	50.	540.	15.	12.	0.	-7.	-2.	-	2.1	2.2(68.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
14	NWSWNE 18 1S 2W	945	366	1.50	110.	4202.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	120.	330.	40.	40.	0.	-20.	-15.	-	1.4	1.5(65.)	4850.
2	360.	35.	395.	40.	40.	0.	-10.	-5.	-	2.1	2.3(67.)	3280.
3	420.	55.	480.	45.	40.	0.	-6.	-1.	-	2.1	2.2(68.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
15	SWNWNE 18 1S 2W	922	556	1.45	103.	3534.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	62.	337.	50.	50.	0.	-18.	-12.	-	1.5	1.7(66.)	4400.
2	388.	38.	435.	35.	35.	0.	9.	15.	-	4.9	5.3(68.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
16	SWSWSE 18 1S 2W	0	865	1.20	116.	4525.	1.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	186.	160.	546.	90.	25.	0.	-4.	6.	-	2.5	2.8(65.)	2730.
2	660.	20.	680.	40.	18.	0.	4.	14.	-	3.2	3.4(70.)	2180.
3	744.	36.	780.	15.	14.	0.	-17.	-7.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
17	SWNESW 18 1S 2W	954	1165	1.25	102.	4612.	0.92

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	150.	100.	495.	50.	50.	0.	-3.	6.	-	2.5	2.9(65.)	2730.
2	520.	60.	600.	45.	40.	0.	3.	12.	-	3.2	3.5(68.)	2180.
3	620.	75.	760.	45.	45.	0.	17.	25.	-	7.7	8.3(69.)	960.
4	840.	30.	870.	12.	16.	0.	-11.	-2.	-	1.7	1.8(71.)	3920.
5	895.	35.	900.	8.	12.	0.	-25.	-15.	-	1.0	1.0(72.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
18	NWNENE 19 1S 2W	975	765	2.13	107.	4444.	0.91

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	160.	530.	40.	35.	0.	-20.	-24.	-	1.5	1.7(65.)	4400.
2	590.	47.	659.	27.	25.	0.	-12.	-16.	-	2.1	2.2(69.)	3280.
3	710.	30.	760.	12.	13.	0.	-33.	-37.	-	0.8	0.9(70.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
19	NESESE 19 1S 2W	961	751	1.64	168.	3485.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	175.	575.	50.	37.	0.	-16.	-13.	-	1.5	1.7(66.)	4400.
2	597.	40.	775.	25.	25.	0.	-16.	-14.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
20	NWNENW 20 1S 2W	964	748	1.76	100.	1450.	2.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	170.	500.	60.	50.	0.	-38.	-37.	-	0.7	0.8(67.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
21	SWSENE 20 1S 2W	1025	552	1.73	170.	3516.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	400.	16.	470.	35.	35.	0.	-20.	-20.	-	1.4	1.5(68.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
22	SWNWSW 20 1S 2W	0	570	1.81	142.	4478.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	160.	640.	50.	40.	0.	-10.	-10.	-	2.1	2.3(65.)	3280.
2	660.	30.	700.	35.	25.	0.	-18.	-18.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
23	NWNESW 28 1S 2W	1035	1153	1.44	90.	2212.	1.56

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	90.	30.	168.	50.	50.	0.	-13.	-7.	-	1.6	1.9(65.)	3750.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
24	SWSESW 29 1S 2W	1036	749	1.45	40.	1376.	2.51

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	50.	22.	103.	60.	60.	0.	1.	7.	-	8.8	10.1(65.)	700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
25	NESENWSE 30 1S 2W	0	251	1.32	100.	1357.	2.47

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	150.	32.	278.	50.	50.	0.	-13.	-5.	-	1.6	1.8(67.)	3750.
2	355.	24.	380.	55.	50.	0.	-23.	-15.	-	1.1	1.2(72.)	5400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
26	SENWNWNE 30 1S 2W	0	1154	2.10	41.	1600.	2.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	110.	120.	360.	60.	50.	0.	-17.	-20.	-	1.6	1.9(66.)	3750.
2	430.	155.	645.	60.	50.	0.	-21.	-24.	-	1.4	1.4(72.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
27	SWSWNW 31 1S 2W	1059	548	1.57	95.	2676.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	110.	92.	350.	60.	35.	0.	-8.	-4.	-	2.8	3.2(65.)	2200.
2	390.	20.	410.	50.	50.	0.	-1.	3.	-	5.4	5.8(69.)	1130.
3	460.	60.	610.	70.	50.	0.	5.	9.	-	4.0	4.3(70.)	1780.
4	650.	142.	895.	100.	37.	0.	-16.	-12.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
28	NENENESW 31 1S 2W	1055	848	1.97	94.	2511.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	150.	80.	298.	50.	50.	0.	-17.	-19.	-	1.6	1.9(65.)	3750.
2	320.	26.	370.	50.	40.	0.	-12.	-14.	-	1.9	2.1(68.)	3200.
3	440.	13.	453.	30.	40.	0.	2.	0.	-	3.8	4.0(69.)	1860.
4	530.	34.	613.	35.	40.	0.	-8.	-10.	-	2.1	2.2(70.)	3280.
5	640.	50.	704.	50.	50.	0.	-14.	-16.	-	1.7	1.8(72.)	3920.
6	720.	238.	1150.	50.	50.	0.	-22.	-24.	-	1.4	1.4(75.)	4850.
7	1245.	40.	1285.	10.	25.	0.	-32.	-34.	-	0.8	0.8(80.)	7800.

29		NESESW 32 1S 2W		1068	348	1.29		20.	1565.		2.08		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	35.	90.	360.	50.	50.	0.	-18.	-9.	-	1.4	1.6(64.)		4600.
2	430.	156.	710.	70.	70.	0.	-28.	-19.	-	1.0	1.0(72.)		6500.
3	730.	110.	950.	70.	70.	0.	-15.	-6.	-	1.5	1.4(79.)		4400.
4	1030.	15.	1045.	35.	35.	0.	-41.	-37.	-	0.5	0.5(85.)		12500.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)			
30		SENWNW 32 1S 2W		1090	1049	1.19		70.	1874.		2.05		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	90.	133.	370.	50.	50.	0.	-23.	-13.	-	1.1	1.3(65.)		5400.
2	410.	20.	430.	25.	50.	0.	-29.	-19.	-	0.8	0.9(72.)		7800.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)			
31		SWSWNE 1 1S 3W		902	556	1.78		75.	3500.		1.13		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	98.	82.	200.	90.	60.	0.	9.	9.	-	FRESH	FRESH		FRESH
2	220.	93.	334.	70.	25.	0.	12.	12.	-	5.3	6.2(66.)		1300.
3	360.	40.	400.	35.	24.	0.	9.	9.	-	4.9	5.9(68.)		1460.
4	440.	30.	470.	20.	19.	0.	-1.	-1.	-	2.6	2.9(69.)		2590.
5	500.	50.	550.	20.	16.	0.	-9.	-9.	-	2.1	2.2(69.)		3280.
6	590.	30.	620.	10.	14.	0.	-26.	-26.	-	1.1	1.2(70.)		5700.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)			
32		NESESW 2 1S 3W		904	1056	1.70		138.	4992.		1.01		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	180.	38.	218.	60.	25.	0.	6.	8.	-	18.7	21.2(65.)		330.
2	230.	25.	255.	55.	23.	0.	9.	11.	-	4.9	5.5(66.)		1460.
3	425.	83.	565.	40.	23.	0.	6.	8.	-	4.0	4.4(68.)		1780.
4	640.	50.	750.	25.	20.	0.	-4.	-2.	-	2.6	2.8(70.)		2590.
5	790.	37.	850.	12.	15.	0.	-17.	-15.	-	1.5	1.6(71.)		4400.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)			
33		SESWSE 2 1S 3W		911	256	1.44		257.	4909.		0.87		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	280.	50.	410.	40.	40.	0.	17.	23.	-	8.2	9.2(66.)		900.
2	420.	52.	472.	32.	32.	0.	26.	25.	-	10.8	11.9(67.)		680.
3	505.	25.	530.	30.	35.	0.	23.	29.	-	17.0	18.6(68.)		458.

4	552.	30.	582.	35.	30.	0.	21.	27.	-	11.8	12.9(68.)	605.
5	590.	67.	692.	25.	20.	0.	15.	21.	-	7.2	7.8(69.)	1010.
6	815.	10.	825.	10.	15.	0.	-15.	-10.	-	1.5	1.6(71.)	4400.
7	910.	23.	933.	5.	10.	0.	-38.	-32.	-	0.7	0.7(71.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
34	NWSWNE 3 1S 3W	1005	950	1.62	300.	2755.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	277.	70.	435.	40.	16.	0.	6.	9.	-	4.0	4.4(67.)	1780.
2	530.	95.	670.	50.	18.	0.	15.	18.	-	7.2	7.6(71.)	1010.
3	690.	30.	720.	35.	16.	0.	6.	9.	-	4.0	4.1(73.)	1780.
4	780.	25.	805.	30.	15.	0.	3.	6.	-	3.8	3.8(74.)	1860.
5	890.	50.	955.	15.	10.	0.	-15.	-12.	-	1.5	1.5(75.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
35	SWSWSW 3 1S 3W	0	1254	1.45	200.	5410.	1.04

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	60.	370.	50.	32.	0.	6.	12.	-	4.0	4.5(66.)	1780.
2	438.	22.	460.	35.	20.	0.	9.	15.	-	4.9	5.4(68.)	1460.
3	625.	65.	720.	35.	30.	0.	17.	23.	-	8.2	8.7(70.)	900.
4	770.	40.	860.	35.	27.	0.	12.	18.	-	5.5	5.7(72.)	1300.
5	960.	40.	1000.	15.	15.	0.	-9.	-5.	-	2.1	2.1(74.)	3280.
6	1020.	25.	1045.	15.	15.	0.	-17.	-11.	-	1.5	1.5(74.)	4400.
7	1055.	35.	1090.	12.	14.	0.	-26.	-20.	-	1.0	1.0(75.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
36	SWNESE 3 1S 3W	1020	870	1.83	297.	5300.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	320.	45.	483.	50.	40.	0.	2.	2.	-	3.2	3.6(67.)	2180.
2	500.	30.	530.	70.	70.	0.	7.	7.	-	4.6	5.0(69.)	1540.
3	560.	70.	740.	50.	35.	0.	12.	12.	-	5.5	5.9(69.)	1300.
4	760.	40.	800.	40.	28.	0.	-7.	-7.	-	2.1	2.1(72.)	3280.
5	940.	40.	990.	25.	25.	0.	-15.	-15.	-	1.5	1.5(74.)	4400.
6	1060.	22.	1082.	50.	50.	0.	-28.	-30.	-	1.0	1.0(75.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
37	SESWSE 3 1S 3W	909	1152	1.82	117.	5115.	1.36

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	53.	205.	40.	30.	0.	9.	9.	-	FRESH	FRESH	FRESH
2	280.	140.	685.	45.	24.	0.	12.	12.	-	5.5	6.1(67.)	1300.
3	870.	15.	685.	16.	16.	0.	-6.	-6.	-	2.5	2.5(75.)	2730.
4	902.	20.	930.	16.	16.	0.	-15.	-15.	-	1.5	1.5(76.)	4400.
5	940.	55.	1000.	12.	15.	0.	-26.	-25.	-	1.1	1.1(76.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
38	NWNWNE 4 1S 3W	927	1147	1.31	100.	2152.	1.60

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	70.	180.	75.	30.	0.	2.	10.	-	8.8	10.0(65.)	700.
2	228.	27.	280.	35.	32.	0.	12.	20.	-	5.5	6.1(67.)	1300.
3	330.	18.	348.	50.	35.	0.	15.	24.	-	7.7	8.3(69.)	960.
4	550.	50.	610.	50.	33.	0.	12.	20.	-	5.5	5.7(72.)	1300.
5	640.	93.	800.	60.	35.	0.	9.	17.	-	4.6	4.7(74.)	1540.
6	830.	25.	855.	25.	26.	0.	-7.	-1.	-	2.1	2.0(77.)	3280.
7	880.	16.	896.	18.	18.	0.	-15.	-7.	-	1.5	1.5(78.)	4400.
8	960.	30.	990.	15.	15.	0.	-32.	-24.	-	0.8	0.8(79.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
39	NENWNW 4 1S 3W	934	755	2.22	197.	2781.	1.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	265.	55.	350.	35.	29.	0.	5.	1.	-	4.6	5.1(67.)	1540.
2	373.	22.	395.	50.	32.	0.	20.	16.	-	17.0	18.5(68.)	458.
3	440.	18.	458.	35.	35.	0.	15.	11.	-	8.8	9.5(69.)	850.
4	500.	130.	820.	40.	25.	0.	10.	5.	-	5.5	5.9(70.)	1300.
5	915.	35.	950.	50.	60.	0.	-10.	-14.	-	2.1	2.0(76.)	3280.
6	1010.	45.	1055.	7.	15.	0.	-30.	-35.	-	1.0	1.0(77.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
40	SESESW 4 1S 3W	919	847	1.25	104.	2905.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	20.	160.	40.	23.	0.	2.	11.	-	8.8	10.0(65.)	700.
2	180.	40.	240.	50.	50.	0.	10.	19.	-	4.9	5.5(66.)	1460.
3	325.	70.	430.	45.	25.	0.	5.	14.	-	3.8	4.1(68.)	1850.
4	460.	37.	512.	45.	25.	0.	15.	24.	-	6.7	7.2(70.)	1090.
5	680.	30.	710.	50.	30.	0.	13.	22.	-	5.5	5.7(73.)	1300.
6	750.	140.	932.	50.	25.	0.	10.	19.	-	4.9	5.0(75.)	1420.
7	972.	40.	1058.	40.	22.	0.	-10.	-1.	-	1.7	1.7(76.)	3920.
8	1105.	10.	1115.	15.	13.	0.	-23.	-15.	-	1.0	1.0(78.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
41	NESWSE 5 1S 3W	919	941	1.62	118.	3177.	0.83

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	250.	50.	310.	50.	33.	0.	18.	21.	-	10.0	11.3(66.)	750.
2	370.	30.	430.	25.	22.	0.	5.	8.	-	4.0	4.5(67.)	1780.
3	510.	30.	550.	30.	24.	0.	15.	18.	-	7.2	7.9(68.)	1020.
4	563.	35.	640.	30.	23.	0.	10.	13.	-	5.3	5.8(68.)	1350.
5	715.	30.	765.	35.	26.	0.	13.	15.	-	5.5	5.9(69.)	1300.
6	805.	25.	830.	40.	27.	0.	15.	18.	-	7.2	7.6(70.)	1010.
7	835.	43.	910.	35.	27.	0.	10.	13.	-	5.3	5.6(70.)	1350.

8	924.	60.	1015.	32.	25.	0.	-6.	9.	-	4.0	4.2(71.)	1780.
9	1158.	12.	1170.	10.	16.	0.	-15.	-13.	-	1.5	1.5(73.)	4400.
10	1210.	32.	1242.	8.	17.	0.	-31.	-28.	-	0.8	0.8(74.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
42	SESENE 5 1S 3W	923	1249	1.41	80.	2710.	1.53

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	225.	40.	310.	32.	32.	0.	17.	24.	-	8.2	9.1(67.)	900.
2	450.	20.	470.	27.	27.	0.	18.	25.	-	8.8	9.3(70.)	850.
3	510.	15.	515.	25.	25.	0.	6.	13.	-	4.0	4.2(71.)	1780.
4	650.	23.	673.	35.	30.	0.	15.	22.	-	7.2	7.3(73.)	1010.
5	700.	35.	793.	30.	30.	0.	12.	18.	-	5.5	5.6(74.)	1300.
6	830.	20.	850.	31.	31.	0.	6.	13.	-	4.0	3.9(76.)	1780.
7	915.	20.	983.	23.	20.	0.	-9.	-5.	-	2.1	2.0(78.)	3280.
8	1033.	24.	1057.	10.	20.	0.	-12.	-6.	-	1.7	1.6(79.)	3920.
9	1080.	50.	1130.	13.	18.	0.	-26.	-20.	-	1.0	0.9(80.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
43	SESESW 5 1S 3W	937	955	2.24	93.	5934.	1.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	130.	280.	20.	20.	0.	-7.	-11.	-	4.4	5.0(65.)	1400.
2	305.	58.	363.	45.	25.	0.	7.	3.	-	4.9	5.4(67.)	1460.
3	415.	45.	560.	17.	16.	0.	-2.	-5.	-	3.2	3.5(68.)	2180.
4	613.	30.	658.	25.	20.	0.	5.	1.	-	4.6	4.9(70.)	1540.
5	750.	75.	835.	45.	25.	0.	11.	7.	-	6.7	7.0(72.)	1090.
6	848.	27.	880.	35.	25.	0.	14.	10.	-	8.2	8.4(73.)	900.
7	890.	75.	1025.	45.	23.	0.	7.	3.	-	4.9	5.0(73.)	1460.
8	1038.	42.	1080.	30.	22.	0.	2.	-2.	-	4.0	4.0(75.)	1780.
9	1108.	22.	1130.	12.	18.	0.	-14.	-18.	-	1.7	1.7(76.)	3920.
10	1163.	27.	1190.	10.	18.	0.	-47.	-51.	-	0.5	0.5(76.)	12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
44	SWSENW 5 1S 3W	936	748	1.73	87.	3440.	0.92

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	115.	225.	20.	13.	0.	-7.	-6.	-	2.8	3.2(65.)	2200.
2	265.	42.	312.	50.	24.	0.	12.	13.	-	5.5	6.2(66.)	1300.
3	330.	30.	360.	70.	27.	0.	17.	18.	-	8.8	9.8(67.)	850.
4	380.	120.	735.	23.	18.	0.	6.	7.	-	4.0	4.4(67.)	1780.
5	760.	40.	800.	55.	24.	0.	12.	13.	-	5.5	5.8(70.)	1300.
6	808.	35.	845.	55.	25.	0.	15.	16.	-	7.7	8.1(71.)	960.
7	860.	110.	1030.	45.	20.	0.	12.	13.	-	5.5	5.8(71.)	1300.
8	1050.	20.	1070.	30.	10.	0.	-1.	0.	-	2.6	2.7(73.)	2590.
9	1160.	13.	1173.	10.	13.	0.	-26.	-25.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
45	NWNWNW 5 1S 3W	983	1067	1.64	141.	3511.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	60.	348.	70.	25.	0.	2.	4.	-	3.2	3.5(67.)	2160.
2	380.	95.	535.	45.	22.	0.	14.	16.	-	6.7	7.3(69.)	1090.
3	620.	75.	840.	70.	22.	0.	18.	20.	-	8.8	9.2(72.)	850.
4	867.	37.	908.	60.	25.	0.	21.	24.	-	13.0	13.0(75.)	585.
5	1015.	90.	1135.	45.	23.	0.	18.	20.	-	8.8	8.6(77.)	850.
6	1260.	30.	1298.	9.	9.	0.	-28.	-26.	-	1.0	0.9(80.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
46	NESWSW 6 1S 3W	0	852	1.66	148.	4007.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	188.	55.	265.	30.	25.	0.	-9.	-7.	-	2.1	2.3(66.)	3280.
2	283.	115.	465.	27.	17.	0.	-6.	-4.	-	2.5	2.8(67.)	2730.
3	497.	35.	560.	32.	20.	0.	-1.	1.	-	2.6	2.8(69.)	2590.
4	610.	33.	658.	30.	24.	0.	17.	19.	-	8.2	8.7(71.)	900.
5	758.	123.	1022.	50.	23.	0.	15.	17.	-	7.2	7.4(72.)	1010.
6	1119.	10.	1120.	12.	12.	0.	-15.	-14.	-	1.5	1.5(76.)	4400.
7	1155.	20.	1175.	10.	10.	0.	-35.	-33.	-	0.8	0.8(77.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
47	SWNWNW 6 1S 3W	1001	854	1.98	98.	4074.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	120.	220.	45.	22.	0.	-8.	-10.	-	2.8	3.2(65.)	2200.
2	255.	65.	430.	10.	12.	0.	-14.	-16.	-	1.7	1.9(67.)	3920.
3	440.	128.	720.	40.	20.	0.	7.	5.	-	4.6	5.0(69.)	1540.
4	909.	16.	926.	45.	20.	0.	14.	13.	-	7.7	7.8(74.)	960.
5	1000.	25.	1025.	30.	23.	0.	18.	16.	-	10.0	10.0(75.)	750.
6	1040.	75.	1150.	25.	20.	0.	7.	5.	-	4.6	4.5(76.)	1540.
7	1155.	15.	1170.	20.	15.	0.	-10.	-13.	-	2.1	2.0(77.)	3280.
8	1200.	18.	1218.	15.	13.	0.	-32.	-34.	-	0.8	0.8(78.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
48	NESWSE 6 1S 3W	940	1054	1.66	296.	6256.	1.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	300.	50.	350.	20.	17.	0.	-3.	-1.	-	2.6	2.9(67.)	2590.
2	370.	20.	400.	35.	26.	0.	3.	5.	-	3.8	4.1(68.)	1860.
3	700.	15.	767.	20.	20.	0.	3.	5.	-	3.8	3.9(71.)	1860.
4	793.	25.	818.	17.	17.	0.	17.	19.	-	8.2	8.5(72.)	900.
5	855.	132.	987.	45.	20.	0.	20.	22.	-	11.8	12.1(73.)	605.
6	1010.	52.	1062.	30.	16.	0.	7.	9.	-	4.0	4.0(75.)	1780.
7	1085.	38.	1208.	15.	13.	0.	-10.	-8.	-	2.1	2.0(75.)	3280.
8	1250.	38.	1292.	4.	8.	0.	-43.	-41.	-	0.5	0.5(77.)	12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

49		NWNENE 6 1S 3W		968	554	1.57		96.	6224.		1.07		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	178.	80.	258.	12.	12.	0.	-18.	-14.	-	1.5	1.7(	65.)	4400.
2	340.	100.	735.	45.	22.	0.	15.	19.	-	7.2	8.0(	67.)	1010.
3	830.	140.	1010.	40.	20.	0.	25.	29.	-	27.0	27.9(	72.)	292.
4	1020.	70.	1130.	30.	18.	0.	10.	14.	-	5.3	5.3(	74.)	1350.
5	1240.	30.	1270.	4.	10.	0.	-40.	-36.	-	0.7	0.7(	77.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
50	SWNENW 7 1S 3W	940	254	1.85	134.	6043.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	200.	100.	390.	15.	15.	0.	-4.	-5.	-	2.6	3.0(	66.)	2590.
2	455.	30.	570.	14.	14.	0.	3.	2.	-	3.8	4.1(	69.)	1860.
3	793.	25.	830.	25.	15.	0.	10.	9.	-	5.3	5.5(	72.)	1350.
4	890.	20.	910.	30.	16.	0.	15.	15.	-	7.7	7.8(	74.)	960.
5	930.	35.	965.	35.	17.	0.	10.	9.	-	5.3	5.4(	74.)	1350.
6	1060.	30.	1090.	10.	15.	0.	-10.	-11.	-	2.1	2.0(	76.)	3280.
7	1150.	20.	1170.	12.	13.	0.	-25.	-26.	-	1.1	1.1(	77.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
51	NWNESE 7 1S 3W	941	753	2.01	102.	6214.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	140.	150.	402.	25.	16.	0.	-5.	-8.	-	2.6	3.0(	65.)	2590.
2	415.	55.	542.	25.	22.	0.	6.	3.	-	4.6	5.0(	68.)	1540.
3	605.	40.	708.	35.	24.	0.	12.	10.	-	6.7	7.1(	70.)	1090.
4	890.	38.	928.	42.	28.	0.	20.	18.	-	13.0	13.3(	73.)	585.
5	940.	110.	1065.	37.	20.	0.	17.	14.	-	8.8	8.9(	74.)	850.
6	1120.	67.	1157.	15.	12.	0.	-11.	-14.	-	2.1	2.0(	76.)	3280.
7	1220.	20.	1240.	7.	8.	0.	-61.	-64.	-	0.4	0.4(	77.)	18000.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
52	SWSENE 7 1S 3W	937	652	1.66	125.	6120.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	140.	110.	310.	35.	15.	0.	1.	3.	-	3.2	3.6(	65.)	2180.
2	328.	80.	433.	27.	15.	0.	6.	8.	-	4.0	4.4(	67.)	1780.
3	415.	13.	428.	27.	15.	0.	13.	16.	-	5.7	6.3(	68.)	1090.
4	570.	85.	840.	25.	20.	0.	12.	14.	-	5.5	5.8(	70.)	1300.
5	885.	50.	935.	45.	21.	0.	25.	25.	-	17.0	17.2(	74.)	458.
6	940.	110.	1050.	38.	19.	0.	20.	22.	-	10.8	10.8(	75.)	680.
7	1085.	15.	1100.	15.	12.	0.	6.	8.	-	4.0	3.9(	77.)	1780.
8	1140.	13.	1153.	13.	13.	0.	-6.	-4.	-	2.5	2.4(	77.)	2730.
9	1170.	17.	1187.	9.	9.	0.	-20.	-18.	-	1.4	1.3(	78.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
53	SWSWSE 8 1S 3W	1040	551	1.82	130.	3284.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	80.	220.	80.	50.	0.	1.	1.	-	8.8	10.0(65.)	700.
2	245.	55.	335.	45.	30.	0.	2.	2.	-	3.2	3.6(66.)	2180.
3	347.	30.	377.	20.	20.	0.	-3.	-3.	-	2.6	2.9(68.)	2590.
4	470.	50.	520.	20.	20.	0.	9.	9.	-	4.9	5.3(69.)	1460.
5	532.	55.	742.	25.	20.	0.	15.	15.	-	7.7	8.2(70.)	960.
6	792.	15.	807.	35.	27.	0.	17.	18.	-	10.0	10.9(73.)	750.
7	910.	165.	1167.	35.	26.	0.	23.	23.	-	19.0	19.2(74.)	407.
8	1180.	20.	1235.	17.	17.	0.	6.	6.	-	4.0	3.9(77.)	1780.
9	1320.	22.	1342.	17.	17.	0.	-25.	-25.	-	1.1	1.1(79.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
54	NESENE 8 1S 3W	1001	746	1.80	100.	3090.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	45.	300.	45.	45.	0.	-2.	-2.	-	2.6	3.0(65.)	2590.
2	350.	30.	380.	40.	26.	0.	4.	4.	-	4.0	4.4(68.)	1780.
3	410.	16.	426.	30.	23.	0.	10.	11.	-	5.3	5.8(68.)	1350.
4	780.	95.	950.	45.	30.	0.	10.	10.	-	5.3	5.4(73.)	1350.
5	1020.	50.	1110.	40.	25.	0.	-5.	-5.	-	2.5	2.5(76.)	2730.
6	1160.	40.	1210.	17.	17.	0.	-10.	-10.	-	2.1	2.0(78.)	3280.
7	1240.	18.	1258.	14.	20.	0.	-23.	-23.	-	1.1	1.1(79.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
55	SWSWSW 8 1S 3W	0	354	1.58	100.	6401.	0.96

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	230.	445.	35.	17.	0.	-4.	-1.	-	2.6	3.0(64.)	2590.
2	450.	145.	700.	35.	13.	0.	11.	14.	-	5.5	6.0(68.)	1300.
3	720.	30.	750.	13.	13.	0.	15.	18.	-	7.2	7.6(70.)	1010.
4	840.	45.	885.	45.	16.	0.	20.	24.	-	11.8	12.3(72.)	605.
5	915.	130.	1060.	45.	16.	0.	25.	28.	-	27.0	27.9(72.)	292.
6	1080.	32.	1112.	40.	15.	0.	23.	26.	-	17.0	17.2(74.)	458.
7	1170.	15.	1185.	10.	10.	0.	-5.	-2.	-	2.5	2.5(75.)	2730.
8	1230.	20.	1250.	8.	10.	0.	-20.	-17.	-	1.4	1.3(75.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
56	NWNENW 8 1S 3W	0	155	1.43	95.	6036.	1.27

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	165.	60.	356.	40.	35.	0.	-6.	0.	-	2.1	2.3(66.)	3280.
2	364.	76.	440.	45.	36.	0.	6.	12.	-	4.0	4.4(68.)	1780.
3	703.	52.	850.	35.	27.	0.	13.	16.	-	5.5	5.7(72.)	1300.
4	875.	45.	922.	45.	28.	0.	17.	23.	-	8.2	8.2(75.)	900.
5	1029.	50.	1078.	35.	17.	0.	12.	18.	-	5.5	5.4(76.)	1300.
6	1130.	10.	1140.	18.	15.	0.	-12.	-7.	-	1.5	1.5(78.)	4400.
7	1230.	13.	1243.	10.	12.	0.	-29.	-24.	-	1.0	1.0(79.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
57	NESWNE 9 1S 3W	0	647	1.87	84.	2647.	1.30

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	60.	160.	25.	13.	0.	-5.	-6.	-	4.4	5.0(65.)	1400.
2	210.	38.	252.	45.	20.	0.	5.	4.	-	4.0	4.5(66.)	1788.
3	370.	20.	590.	45.	15.	0.	5.	4.	-	4.0	4.4(68.)	1780.
4	660.	61.	795.	45.	17.	0.	5.	4.	-	4.0	4.1(72.)	1780.
5	830.	24.	854.	50.	17.	0.	8.	7.	-	4.9	4.9(74.)	1460.
6	910.	75.	1010.	35.	15.	0.	-4.	-5.	-	2.6	2.6(75.)	2590.
7	1040.	20.	1086.	20.	17.	0.	-13.	-14.	-	1.7	1.7(77.)	3920.
8	1110.	28.	1140.	8.	15.	0.	-25.	-25.	-	1.1	1.1(78.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
58	NWSWNW 9 1S 3W	0	951	1.68	100.	5991.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	55.	200.	40.	25.	0.	-15.	-13.	-	1.6	1.9(65.)	3750.
2	220.	20.	240.	17.	17.	0.	-6.	-4.	-	2.5	2.8(66.)	2730.
3	280.	27.	340.	40.	23.	0.	2.	4.	-	3.2	3.6(67.)	2180.
4	650.	140.	970.	45.	23.	0.	9.	11.	-	4.9	5.1(71.)	1460.
5	1000.	88.	1108.	40.	20.	0.	15.	17.	-	7.2	7.2(75.)	1010.
6	1150.	30.	1180.	15.	15.	0.	-5.	-3.	-	2.5	2.4(77.)	2730.
7	1210.	30.	1240.	14.	14.	0.	-20.	-18.	-	1.4	1.3(78.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
59	NENESW 10 1S 3W	911	1252	1.23	200.	5116.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	70.	350.	25.	21.	0.	7.	17.	-	4.0	4.5(66.)	1780.
2	380.	30.	410.	25.	20.	0.	10.	20.	-	4.9	5.4(68.)	1460.
3	555.	145.	720.	45.	25.	0.	18.	28.	-	8.2	8.8(70.)	900.
4	830.	30.	860.	30.	20.	0.	13.	23.	-	5.5	5.9(73.)	1300.
5	882.	27.	930.	30.	25.	0.	8.	18.	-	4.0	4.1(73.)	1780.
6	990.	35.	1025.	15.	13.	0.	1.	11.	-	2.6	2.7(74.)	2590.
7	1050.	58.	1108.	18.	18.	0.	-4.	-6.	-	2.0	2.5(75.)	2730.
8	1150.	25.	1185.	7.	10.	0.	-35.	-25.	-	0.7	0.7(76.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
60	NWNWSE 10 1S 3W	908	253	1.87	67.	5128.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	90.	212.	17.	17.	0.	-7.	-8.	-	2.8	3.2(64.)	2200.
2	242.	26.	268.	15.	15.	0.	9.	8.	-	5.3	5.9(66.)	1350.
3	310.	12.	322.	15.	15.	0.	17.	17.	-	10.0	11.1(67.)	750.
4	360.	50.	410.	50.	23.	0.	29.	29.	-	FRESH	FRESH	FRESH
5	420.	145.	698.	40.	20.	0.	23.	22.	-	19.0	20.8(68.)	407.
6	700.	60.	760.	50.	25.	0.	29.	29.	-	FRESH	FRESH	FRESH

7	1020.	68.	1088.	15.	14.	0.	-12.	-13.	-	1.7	1.7(74.)	3920.
8	1152.	12.	1154.	8.	8.	0.	-46.	-48.	-	0.5	0.5(76.)	12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
61	SESWNESE 10 1S 3W	0	669	1.67	100.	2212.	2.55

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	85.	310.	40.	25.	0.	20.	22.	-	11.8	13.1(67.)	605.
2	340.	55.	400.	60.	30.	0.	29.	29.	-	FRESH	FRESH	FRESH
3	490.	30.	550.	30.	23.	0.	21.	23.	-	13.0	12.8(76.)	585.
4	570.	140.	840.	45.	30.	0.	25.	27.	-	22.0	21.2(78.)	357.
5	935.	35.	995.	30.	21.	0.	7.	9.	-	4.0	3.5(87.)	1780.
6	1015.	45.	1060.	15.	15.	0.	-11.	-9.	-	1.7	1.4(89.)	3920.
7	1110.	30.	1140.	5.	10.	0.	-52.	-50.	-	0.4	0.3(92.)	18000.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
62	SWSENE 10 1S 3W	909	1252	1.60	100.	5150.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	80.	260.	45.	35.	0.	15.	18.	-	FRESH	FRESH	FRESH
2	330.	20.	350.	26.	23.	0.	17.	20.	-	8.8	9.7(67.)	850.
3	373.	83.	515.	27.	25.	0.	23.	26.	-	17.0	18.7(68.)	458.
4	547.	115.	720.	45.	23.	0.	26.	28.	-	17.0	18.2(70.)	458.
5	770.	20.	790.	15.	20.	0.	17.	20.	-	8.2	8.5(72.)	900.
6	897.	25.	933.	15.	15.	0.	3.	6.	-	3.8	3.8(73.)	1860.
7	948.	32.	980.	15.	15.	0.	-2.	1.	-	2.6	2.7(74.)	2590.
8	1000.	50.	1050.	13.	13.	0.	-9.	-6.	-	2.1	2.1(74.)	3280.
9	1152.	40.	1203.	3.	7.	0.	-61.	-58.	-	0.2	0.2(76.)	30000.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
63	NENWNW 10 1S 3W	909	1047	1.89	120.	2754.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	70.	350.	50.	35.	0.	6.	5.	-	4.0	4.6(65.)	1780.
2	385.	60.	580.	50.	30.	0.	12.	11.	-	5.5	5.0(68.)	1300.
3	600.	100.	720.	70.	35.	0.	9.	8.	-	5.3	5.6(71.)	1350.
4	775.	25.	800.	40.	25.	0.	-5.	-5.	-	2.5	2.5(73.)	2730.
5	840.	20.	860.	40.	27.	0.	5.	4.	-	4.0	4.0(74.)	1780.
6	910.	13.	923.	20.	25.	0.	-9.	-11.	-	2.1	2.0(75.)	3280.
7	957.	16.	973.	15.	20.	0.	-20.	-21.	-	1.4	1.3(76.)	4850.
8	1010.	26.	1036.	15.	26.	0.	-23.	-24.	-	1.4	1.3(77.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
64	SWSWSE 11 1S 3W	0	670	1.47	135.	2300.	1.50

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	30.	210.	35.	23.	0.	14.	19.	-	6.7	7.5(66.)	1090.
2	240.	50.	290.	45.	25.	0.	42.	42.	-	FRESH	FRESH	FRESH

3	330.	72.	482.	30.	25.	0.	35.	35.	-	FRESH	FRESH	FRESH
4	650.	95.	745.	70.	40.	0.	42.	42.	-	FRESH	FRESH	FRESH
5	790.	10.	800.	25.	20.	0.	14.	22.	-	7.7	7.7(75.)	960.
6	978.	22.	1000.	14.	15.	0.	-8.	-3.	-	2.1	2.0(78.)	3280.
7	1092.	11.	1103.	5.	8.	0.	-49.	-46.	-	0.4	0.3(80.)	18000.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
65	SESWSW 11 1S 3W	917	549	1.60	73.	2603.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	65.	190.	70.	32.	0.	23.	26.	-	19.0	21.8(64.)	407.
2	217.	43.	260.	50.	22.	0.	26.	25.	-	17.0	19.1(66.)	458.
3	280.	45.	390.	35.	20.	0.	17.	20.	-	8.8	9.8(67.)	850.
4	420.	95.	588.	40.	21.	0.	35.	35.	-	FRESH	FRESH	FRESH
5	620.	132.	725.	70.	25.	0.	46.	42.	-	FRESH	FRESH	FRESH
6	890.	37.	1007.	15.	15.	0.	-5.	-2.	-	2.5	2.5(74.)	2730.
7	1030.	30.	1060.	9.	10.	0.	-23.	-20.	-	1.1	1.1(75.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
66	NENWSW 12 1S 3W	0	1247	1.35	52.	3219.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	40.	130.	40.	40.	0.	-9.	-2.	-	2.8	3.2(65.)	2200.
2	140.	40.	220.	50.	50.	0.	5.	15.	-	4.0	4.5(65.)	1780.
3	280.	30.	340.	50.	45.	0.	8.	15.	-	4.6	5.1(67.)	1540.
4	390.	40.	460.	50.	27.	0.	-4.	4.	-	2.5	2.7(68.)	2730.
5	540.	90.	740.	70.	45.	0.	10.	18.	-	4.9	5.2(70.)	1460.
6	800.	55.	870.	60.	35.	0.	3.	11.	-	3.2	3.5(73.)	2180.
7	950.	10.	960.	18.	18.	0.	-23.	-18.	-	1.0	1.0(75.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
67	SENENESE 13 1S 3W	979	1155	1.23	96.	2244.	1.45

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	160.	380.	70.	45.	0.	-6.	4.	-	2.8	3.2(65.)	2200.
2	430.	100.	675.	45.	45.	0.	-6.	4.	-	2.1	2.2(70.)	3280.
3	698.	17.	740.	50.	40.	0.	1.	11.	-	3.1	3.5(74.)	2180.
4	773.	27.	800.	60.	42.	0.	6.	16.	-	4.0	4.0(75.)	1780.
5	828.	11.	839.	45.	45.	0.	15.	28.	-	7.7	7.7(75.)	960.
6	860.	30.	890.	18.	18.	0.	-6.	4.	-	2.1	2.0(76.)	3280.
7	985.	15.	1000.	8.	8.	0.	-23.	-14.	-	1.1	1.1(78.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
68	NWNWSW 14 1S 3W	969	948	1.52	100.	2898.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	50.	322.	50.	43.	0.	-3.	2.	-	5.4	6.1(65.)	1130.
2	350.	10.	360.	25.	40.	0.	12.	18.	-	6.7	7.3(68.)	1090.

3	520.	180.	1005.	40.	35.	0.	17.	22.	-	8.2	9.7(70.)	900.
4	1020.	15.	1035.	35.	26.	0.	6.	11.	-	4.0	3.9(76.)	1780.
5	1115.	25.	1140.	20.	25.	0.	-23.	-18.	-	1.1	1.1(78.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
69	SWSWNW 14 1S 3W	962	1048	1.29	65.	2527.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	30.	160.	45.	45.	0.	-2.	7.	-	5.4	6.2(65.)	1130.
2	180.	70.	250.	55.	50.	0.	12.	21.	-	5.5	5.2(66.)	1300.
3	320.	147.	745.	40.	40.	0.	17.	26.	-	7.7	9.5(67.)	960.
4	870.	55.	950.	45.	45.	0.	12.	21.	-	5.3	5.4(74.)	1350.
5	1035.	57.	1135.	20.	25.	0.	-17.	-8.	-	1.5	1.5(76.)	4400.
6	1220.	22.	1242.	6.	13.	0.	-55.	-46.	-	0.4	0.3(78.)	18000.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
70	NENESE 15 1S 3W	935	948	1.65	70.	2873.	1.62

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	25.	150.	45.	27.	0.	3.	5.	-	16.3	19.5(65.)	375.
2	170.	75.	450.	50.	50.	0.	12.	14.	-	5.5	5.2(66.)	1300.
3	490.	45.	580.	25.	34.	0.	17.	20.	-	8.8	9.2(71.)	850.
4	640.	20.	660.	40.	40.	0.	20.	23.	-	11.8	12.0(74.)	605.
5	740.	70.	850.	50.	35.	0.	17.	19.	-	8.2	8.2(75.)	900.
6	880.	65.	950.	50.	35.	0.	15.	17.	-	7.2	7.0(78.)	1010.
7	1000.	20.	1020.	18.	30.	0.	3.	5.	-	3.8	3.5(80.)	1860.
8	1080.	52.	1133.	20.	22.	0.	-6.	-4.	-	2.5	2.3(81.)	2730.
9	1142.	30.	1162.	20.	20.	0.	-17.	-15.	-	1.5	1.4(82.)	4400.
10	1270.	10.	1280.	5.	15.	0.	-46.	-45.	-	0.5	0.5(84.)	12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
71	NENESW 15 1S 3W	1007	548	1.50	52.	3005.	1.58

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	50.	50.	100.	80.	60.	0.	-17.	-12.	-	1.6	1.9(64.)	3750.
2	120.	50.	185.	32.	32.	0.	5.	10.	-	18.7	21.2(65.)	350.
3	250.	20.	270.	30.	30.	0.	22.	27.	-	17.0	19.7(67.)	458.
4	290.	25.	450.	20.	20.	0.	9.	14.	-	4.9	5.4(68.)	1460.
5	540.	20.	560.	21.	30.	0.	20.	25.	-	10.8	11.2(72.)	680.
6	610.	60.	770.	30.	30.	0.	26.	26.	-	11.8	12.1(73.)	605.
7	790.	60.	900.	35.	27.	0.	22.	27.	-	13.0	12.8(76.)	585.
8	930.	25.	955.	30.	22.	0.	18.	23.	-	8.8	8.5(78.)	850.
9	970.	63.	1070.	25.	22.	0.	12.	17.	-	5.5	5.3(79.)	1300.
10	1110.	30.	1140.	35.	22.	0.	20.	25.	-	10.8	10.1(81.)	680.
11	1208.	100.	1310.	15.	15.	0.	-9.	-4.	-	2.1	1.9(83.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
72	SWSWSE 16 1S 3W	1032	955	1.54	183.	3081.	1.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	238.	75.	412.	50.	40.	0.	-5.	-1.	-	4.4	4.9(67.)	1400.
2	430.	46.	484.	17.	27.	0.	-16.	-12.	-	1.6	1.8(69.)	3750.
3	590.	40.	680.	33.	30.	0.	15.	19.	-	7.2	7.5(71.)	1010.
4	755.	240.	1220.	50.	33.	0.	19.	23.	-	10.0	10.2(73.)	750.
5	1388.	38.	1445.	6.	15.	0.	-25.	-21.	-	1.1	1.1(82.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
73	SWSWNW 16 1S 3W	0	657	1.66	90.	3728.	1.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	83.	220.	45.	45.	0.	-10.	-8.	-	2.8	3.2(64.)	2200.

2	315.	102.	445.	18.	18.	0.	-5.	-3.	-	2.5	2.8(67.)	2730.
3	473.	20.	510.	17.	15.	0.	6.	8.	-	4.0	4.4(68.)	1780.
4	600.	50.	700.	20.	20.	0.	13.	15.	-	6.7	7.2(70.)	1090.
5	730.	38.	790.	24.	21.	0.	20.	22.	-	11.8	12.4(71.)	605.
6	860.	56.	993.	25.	20.	0.	19.	21.	-	10.0	10.3(72.)	750.
7	1070.	77.	1282.	20.	15.	0.	13.	14.	-	5.5	5.5(75.)	1300.
8	1310.	30.	1340.	12.	10.	0.	-15.	-13.	-	1.5	1.5(77.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
74	NWNWNW 17 1S 3W	1006	654	1.27	155.	6413.	1.04

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	190.	455.	26.	13.	0.	-3.	5.	-	2.6	3.0(65.)	2590.
2	545.	60.	770.	28.	16.	0.	14.	23.	-	5.5	5.9(69.)	1300.
3	875.	135.	1150.	40.	15.	0.	20.	29.	-	10.0	10.3(73.)	750.
4	1200.	20.	1220.	14.	11.	0.	-12.	-3.	-	1.5	1.5(76.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
75	SWNWSE 18 1S 3W	1003	659	1.21	105.	3521.	0.84

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	60.	170.	27.	32.	0.	-10.	-8.	-	1.9	2.2(64.)	3200.
2	200.	55.	280.	26.	26.	0.	8.	18.	-	4.0	4.5(65.)	1780.
3	310.	120.	500.	16.	16.	0.	-3.	7.	-	2.5	2.8(66.)	2730.
4	630.	25.	675.	15.	15.	0.	10.	20.	-	4.9	5.3(69.)	1460.
5	725.	50.	765.	20.	20.	0.	24.	34.	-	17.0	18.2(70.)	458.
6	890.	110.	1030.	25.	25.	0.	22.	32.	-	11.8	12.4(71.)	605.
7	960.	60.	1135.	22.	22.	0.	20.	30.	-	10.0	10.4(72.)	750.
8	1180.	30.	1210.	17.	17.	0.	14.	24.	-	5.5	5.5(75.)	1300.
9	1235.	10.	1245.	17.	17.	0.	-4.	5.	-	2.5	2.5(74.)	2730.
10	1270.	13.	1283.	12.	15.	0.	-14.	-5.	-	1.5	1.5(74.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
76	NWSENE 18 1S 3W	842	276	1.13	308.	3836.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	340.	40.	394.	13.	13.	0.	5.	17.	-	3.8	4.1(68.)	1860.
2	450.	50.	505.	16.	12.	0.	23.	35.	-	13.0	14.1(69.)	585.
3	600.	70.	710.	16.	11.	0.	25.	37.	-	17.0	18.0(71.)	458.
4	793.	130.	1010.	20.	13.	0.	30.	30.	-	7.7	7.9(73.)	960.
5	1010.	30.	1040.	11.	11.	0.	-14.	-2.	-	1.5	1.5(75.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
77	SENENE 18 1S 3W	0	454	1.11	126.	3850.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	30.	200.	35.	25.	0.	10.	22.	-	FRESH	FRESH	FRESH
2	230.	30.	260.	20.	20.	0.	6.	18.	-	3.8	4.2(66.)	1860.

3	270.	45.	407.	20.	15.	0.	3.	15.	-	3.2	3.6(67.)	2180.
4	450.	30.	480.	20.	15.	0.	12.	24.	-	5.5	5.7(69.)	1350.
5	500.	15.	515.	23.	15.	0.	20.	33.	-	10.8	11.6(69.)	680.
6	619.	40.	737.	14.	28.	0.	22.	34.	-	10.8	11.4(71.)	680.
7	815.	45.	879.	30.	18.	0.	24.	36.	-	14.0	14.4(73.)	550.
8	898.	70.	967.	40.	18.	0.	26.	25.	-	5.5	5.6(74.)	1300.
9	992.	63.	1100.	40.	20.	0.	22.	34.	-	10.8	10.8(75.)	680.
10	1130.	45.	1186.	15.	12.	0.	-3.	9.	-	2.5	2.5(77.)	2730.
11	1200.	38.	1238.	12.	12.	0.	-11.	1.	-	1.5	1.5(77.)	4400.
12	1250.	15.	1265.	9.	9.	0.	-20.	-9.	-	1.1	1.1(78.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
78	NWSW 18 1S 3W	951	373	1.36	365.	7680.	1.04

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	150.	560.	10.	10.	0.	-1.	5.	-	2.6	2.9(67.)	2590.
2	600.	40.	640.	12.	12.	0.	11.	18.	-	5.3	5.7(70.)	1350.
3	680.	30.	728.	13.	13.	0.	10.	25.	-	8.8	9.3(71.)	850.
4	790.	230.	1095.	12.	10.	0.	22.	29.	-	13.0	13.5(72.)	585.
5	1120.	45.	1165.	10.	8.	0.	14.	22.	-	6.7	6.7(75.)	1090.
6	1222.	10.	1232.	14.	14.	0.	-11.	-5.	-	1.7	1.7(76.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
79	NENESW 18 1S 3W	940	953	1.40	341.	5550.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	440.	45.	485.	16.	7.	0.	-10.	-3.	-	1.7	1.8(69.)	3920.
2	669.	50.	800.	45.	25.	0.	12.	19.	-	5.5	5.8(71.)	1300.
3	870.	110.	1005.	40.	17.	0.	20.	27.	-	10.8	11.0(74.)	680.
4	1020.	65.	1085.	37.	16.	0.	10.	17.	-	4.9	4.9(75.)	1460.
5	1110.	34.	1144.	25.	15.	0.	5.	12.	-	3.8	3.7(76.)	1860.
6	1200.	28.	1228.	7.	12.	0.	-15.	-8.	-	1.5	1.5(77.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
80	NENWNW 18 1S 3W	939	853	1.63	290.	5476.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	310.	150.	530.	15.	12.	0.	-17.	-14.	-	1.5	1.7(67.)	4400.
2	580.	25.	605.	10.	15.	0.	-3.	-0.	-	2.6	2.8(71.)	2590.
3	655.	55.	730.	35.	20.	0.	9.	12.	-	4.9	5.1(72.)	1460.
4	790.	60.	515.	35.	22.	0.	11.	14.	-	5.5	5.6(74.)	1300.
5	940.	40.	980.	45.	22.	0.	15.	18.	-	7.2	7.1(76.)	1010.
6	1020.	40.	1060.	25.	25.	0.	4.	7.	-	3.8	3.7(77.)	1860.
7	1090.	28.	1118.	15.	15.	0.	-11.	-9.	-	1.7	1.6(78.)	3920.
8	1140.	32.	1172.	11.	14.	0.	-15.	-12.	-	1.5	1.4(78.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
81	SENW 18 1S 3W	939	573	0.89	365.	8050.	0.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	392.	15.	410.	10.	10.	0.	-1.	15.	-	2.5	2.8(67.)	2730.
2	445.	25.	470.	12.	12.	0.	-10.	5.	-	1.5	1.6(68.)	4400.
3	500.	25.	525.	9.	8.	0.	-7.	9.	-	1.7	1.9(68.)	3920.
4	570.	49.	619.	10.	10.	0.	-1.	15.	-	2.5	2.7(69.)	2730.
5	670.	75.	830.	20.	16.	0.	12.	28.	-	4.0	4.3(70.)	1780.
6	872.	80.	985.	25.	17.	0.	16.	32.	-	5.3	5.5(72.)	1350.
7	990.	95.	1140.	17.	17.	0.	5.	21.	-	3.2	3.3(73.)	2180.
8	1152.	22.	1174.	9.	9.	0.	-10.	5.	-	1.5	1.5(74.)	4400.
9	1193.	45.	1240.	7.	8.	0.	-19.	-3.	-	1.1	1.2(75.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
82	NWSENE 19 1S 3W	1013	252	1.17	338.	5423.	0.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	360.	30.	390.	15.	10.	0.	-14.	-3.	-	1.6	1.8(67.)	3750.
2	420.	50.	550.	10.	8.	0.	-12.	-1.	-	1.5	1.7(67.)	4400.
3	640.	215.	1145.	25.	15.	0.	7.	18.	-	4.0	4.3(69.)	1780.
4	1165.	55.	1255.	15.	11.	0.	-6.	5.	-	2.1	2.1(74.)	3280.
5	1280.	12.	1292.	7.	7.	0.	-20.	-10.	-	1.1	1.1(75.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
83	SWSESE 19 1S 3W	0	754	1.54	130.	4156.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	30.	200.	50.	45.	0.	1.	5.	-	0.8	10.0(65.)	700.
2	265.	35.	300.	15.	12.	0.	-10.	-5.	-	2.8	3.1(67.)	2200.
3	310.	45.	369.	12.	12.	0.	-27.	-23.	-	1.0	1.1(67.)	6200.
4	400.	30.	430.	12.	14.	0.	-14.	-10.	-	1.5	1.6(68.)	4400.
5	452.	30.	500.	13.	15.	0.	-10.	-6.	-	2.1	2.2(69.)	3280.
6	555.	15.	570.	13.	13.	0.	-7.	-3.	-	2.1	2.2(70.)	3280.
7	640.	48.	700.	35.	20.	0.	3.	7.	-	3.8	3.9(71.)	1860.
8	730.	90.	800.	35.	21.	0.	10.	14.	-	5.3	5.4(72.)	1350.
9	930.	32.	962.	50.	24.	0.	15.	19.	-	7.2	7.3(74.)	1010.
10	985.	27.	1032.	30.	20.	0.	12.	16.	-	5.5	5.5(75.)	1300.
11	1100.	20.	1120.	22.	17.	0.	-1.	3.	-	2.6	2.6(76.)	2550.
12	1130.	75.	1205.	22.	16.	0.	-5.	-1.	-	2.5	2.5(77.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
84	SWNENW 19 1S 3W	955	148	0.82	237.	4792.	1.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	270.	90.	410.	20.	10.	0.	-6.	11.	-	1.7	1.9(66.)	3920.
2	460.	50.	510.	20.	12.	0.	-12.	5.	-	1.5	1.6(68.)	4400.
3	560.	40.	670.	50.	40.	0.	7.	24.	-	3.2	3.4(69.)	2180.
4	805.	120.	1000.	70.	35.	0.	14.	31.	-	4.6	4.8(72.)	1540.
5	1110.	27.	1137.	20.	12.	0.	-9.	8.	-	1.5	1.5(75.)	4400.
6	1172.	23.	1195.	15.	13.	0.	-20.	-3.	-	1.0	1.0(76.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
85	SE 19 1S 3W	980	773	1.45	425.	8355.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	475.	55.	530.	10.	10.	0.	-16.	-10.	-	1.5	1.6(69.)	4400.
2	555.	15.	570.	10.	10.	0.	-12.	-5.	-	1.7	1.8(69.)	3920.
3	610.	60.	755.	13.	13.	0.	-5.	1.	-	2.5	2.7(70.)	2730.
4	810.	132.	1030.	30.	20.	0.	-6.	-0.	-	2.1	2.1(72.)	3280.
5	1063.	20.	1110.	20.	20.	0.	-10.	-4.	-	2.1	2.1(75.)	3280.
6	1137.	55.	1192.	13.	13.	0.	-20.	-14.	-	1.4	1.3(76.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
86	SENW 19 1S 3W	964	1172	0.94	362.	7780.	0.96

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	380.	150.	550.	9.	9.	0.	-4.	11.	-	2.1	2.3(67.)	3280.
2	600.	20.	620.	11.	10.	0.	-1.	14.	-	2.5	2.7(69.)	2730.
3	650.	40.	710.	10.	10.	0.	5.	20.	-	3.2	3.4(70.)	2180.
4	725.	55.	790.	20.	13.	0.	13.	28.	-	4.9	5.2(70.)	1460.
5	820.	60.	890.	25.	17.	0.	22.	37.	-	8.8	9.2(71.)	850.
6	920.	40.	985.	30.	25.	0.	15.	30.	-	5.3	5.5(72.)	1350.
7	1050.	50.	1100.	11.	10.	0.	1.	15.	-	2.6	2.7(74.)	2590.
8	1122.	30.	1152.	12.	12.	0.	-3.	12.	-	2.1	2.1(74.)	3280.
9	1190.	30.	1220.	11.	10.	0.	-11.	4.	-	1.5	1.5(75.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
87	SESWNW 20 1S 3W	1046	1153	1.91	70.	3544.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	90.	270.	100.	45.	0.	1.	-0.	-	8.8	10.1(65.)	700.
2	300.	72.	375.	35.	26.	0.	-10.	-11.	-	2.8	3.1(67.)	2200.
3	429.	40.	470.	14.	14.	0.	-25.	-27.	-	1.1	1.3(68.)	5700.
4	565.	35.	600.	12.	16.	0.	-12.	-13.	-	1.7	1.8(70.)	3920.
5	610.	50.	920.	12.	17.	0.	-9.	-10.	-	2.1	2.2(71.)	3280.
6	990.	40.	1030.	40.	29.	0.	15.	14.	-	7.7	7.7(75.)	960.
7	1063.	55.	1160.	50.	35.	0.	10.	9.	-	5.3	5.2(76.)	1350.
8	1200.	25.	1225.	13.	20.	0.	-7.	-8.	-	2.5	2.4(78.)	2730.
9	1305.	15.	1320.	10.	15.	0.	-22.	-24.	-	1.4	1.3(79.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
88	SWSWNE 21 1S 3W	1019	957	1.94	352.	7124.	0.77

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	420.	80.	500.	14.	15.	0.	-10.	-12.	-	2.8	3.1(67.)	2200.
2	540.	20.	560.	20.	20.	0.	2.	0.	-	3.8	4.1(68.)	1860.
3	630.	40.	717.	23.	23.	0.	10.	8.	-	5.5	6.0(68.)	1300.
4	730.	45.	780.	27.	27.	0.	17.	15.	-	8.8	9.5(69.)	850.
5	820.	40.	900.	25.	25.	0.	15.	13.	-	7.7	8.2(70.)	960.
6	940.	60.	1070.	23.	23.	0.	12.	10.	-	5.5	5.8(71.)	1300.

7	1122.	28.	1150.	25.	27.	0.	15.	13.	-	7.7	8.0(72.)	960.
8	1160.	52.	1234.	20.	23.	0.	5.	3.	-	4.0	4.1(72.)	1780.
9	1270.	16.	1286.	17.	19.	0.	-2.	-4.	-	2.6	2.7(73.)	2590.
10	1300.	20.	1320.	12.	14.	0.	-15.	-17.	-	1.5	1.5(73.)	4400.
11	1355.	15.	1370.	13.	15.	0.	-20.	-22.	-	1.4	1.4(74.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
89	SESESW 21 1S 3W	1024	654	1.15	300.	6990.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	330.	50.	400.	23.	15.	0.	-4.	7.	-	2.5	2.8(67.)	2730.
2	430.	16.	446.	20.	14.	0.	-10.	1.	-	1.7	1.9(68.)	3920.
3	470.	15.	485.	13.	15.	0.	-4.	7.	-	2.5	2.7(69.)	2730.
4	520.	40.	560.	25.	15.	0.	-1.	10.	-	2.6	2.9(69.)	2590.
5	640.	60.	815.	35.	17.	0.	11.	22.	-	4.9	5.2(70.)	1460.
6	850.	40.	890.	45.	15.	0.	13.	24.	-	5.5	5.7(73.)	1300.
7	925.	90.	1045.	45.	18.	0.	15.	25.	-	5.5	5.6(73.)	1300.
8	1100.	70.	1235.	35.	16.	0.	11.	22.	-	4.9	4.9(75.)	1460.
9	1300.	30.	1350.	10.	10.	0.	-17.	-5.	-	1.4	1.3(77.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
90	NWNWSE 21 1S 3W	0	662	1.43	100.	2200.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	110.	290.	30.	30.	0.	-7.	-1.	-	2.8	3.2(65.)	2200.
2	330.	40.	370.	70.	35.	0.	8.	14.	-	FRESH	FRESH	FRESH
3	430.	23.	453.	12.	17.	0.	-21.	-15.	-	1.4	1.5(69.)	4600.
4	488.	30.	550.	25.	20.	0.	-5.	1.	-	2.5	2.7(69.)	2730.
5	650.	50.	735.	45.	31.	0.	8.	14.	-	4.6	4.8(71.)	1540.
6	750.	25.	775.	50.	40.	0.	12.	18.	-	5.5	5.7(73.)	1300.
7	940.	117.	1070.	55.	36.	0.	10.	15.	-	4.9	4.9(75.)	1460.
8	1120.	40.	1160.	55.	34.	0.	12.	18.	-	5.5	5.4(77.)	1300.
9	1180.	55.	1236.	26.	26.	0.	-3.	3.	-	2.6	2.6(78.)	2590.
10	1345.	15.	1360.	10.	12.	0.	-23.	-17.	-	1.1	1.1(80.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
91	SWSWNW 21 1S 3W	0	662	1.77	100.	2204.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	80.	250.	50.	45.	0.	1.	2.	-	8.8	10.0(65.)	700.
2	300.	20.	320.	35.	30.	0.	4.	5.	-	4.0	4.4(67.)	1780.
3	350.	29.	379.	40.	28.	0.	-2.	-1.	-	2.6	2.9(66.)	2590.
4	399.	40.	440.	15.	15.	0.	-15.	-15.	-	1.5	1.6(68.)	4400.
5	470.	13.	483.	14.	15.	0.	-20.	-20.	-	1.4	1.5(69.)	4850.
6	498.	14.	522.	12.	10.	0.	-6.	-5.	-	2.5	2.7(69.)	2730.
7	560.	22.	582.	20.	25.	0.	2.	3.	-	3.2	3.4(70.)	2160.
8	688.	95.	1090.	30.	26.	0.	10.	11.	-	5.3	5.5(72.)	1350.
9	1130.	48.	1178.	45.	32.	0.	5.	5.	-	4.0	3.9(77.)	1780.
10	1205.	19.	1224.	25.	22.	0.	-4.	-4.	-	2.6	2.6(78.)	2590.
11	1317.	15.	1332.	10.	16.	0.	-11.	-11.	-	2.1	1.9(79.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
92	NWNWSW 22 1S 3W	1056	551	1.64	318.	6437.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	360.	20.	380.	50.	22.	0.	10.	13.	-	5.3	5.8(68.)	1350.
2	420.	80.	515.	23.	15.	0.	-12.	-10.	-	1.7	1.8(68.)	3920.
3	595.	40.	670.	25.	20.	0.	-4.	-2.	-	2.6	2.8(70.)	2590.
4	710.	25.	735.	35.	30.	0.	15.	18.	-	7.2	7.5(72.)	1010.
5	760.	36.	800.	30.	20.	0.	7.	9.	-	4.0	4.1(72.)	1780.
6	900.	135.	1220.	40.	25.	0.	15.	17.	-	7.2	7.3(74.)	1010.
7	1289.	16.	1296.	25.	17.	0.	-4.	-2.	-	2.6	2.5(78.)	2590.
8	1359.	55.	1405.	15.	17.	0.	-20.	-18.	-	1.4	1.3(79.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
93	SWNENE 22 1S 3W	941	951	1.81	49.	2657.	1.49

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	65.	30.	110.	45.	40.	0.	-2.	-2.	-	5.4	5.2(64.)	1130.
2	162.	21.	187.	45.	40.	0.	6.	6.	-	18.7	21.0(66.)	330.
3	290.	42.	418.	45.	35.	0.	15.	15.	-	7.7	8.4(68.)	960.
4	480.	32.	512.	45.	36.	0.	22.	22.	-	17.0	18.0(71.)	458.
5	560.	20.	600.	40.	30.	0.	13.	13.	-	5.7	7.0(72.)	1090.
6	715.	25.	755.	35.	27.	0.	6.	6.	-	4.0	4.0(74.)	1780.
7	800.	60.	860.	45.	35.	0.	17.	17.	-	8.8	8.8(75.)	850.
8	921.	40.	1010.	45.	33.	0.	11.	11.	-	5.5	5.4(77.)	1300.
9	1120.	16.	1136.	30.	27.	0.	5.	5.	-	4.0	3.9(80.)	1780.
10	1158.	32.	1190.	25.	25.	0.	-10.	-10.	-	2.1	1.9(81.)	3280.
11	1210.	43.	1260.	12.	17.	0.	-14.	-14.	-	1.5	1.4(81.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
94	NENESESE 22 1S 3W	997	850	1.76	70.	2698.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	80.	304.	40.	40.	0.	3.	4.	-	16.3	18.5(65.)	375.
2	330.	60.	500.	50.	30.	0.	16.	17.	-	8.2	9.0(68.)	900.
3	572.	37.	670.	35.	30.	0.	20.	21.	-	11.8	12.5(71.)	605.
4	822.	177.	1128.	40.	32.	0.	22.	23.	-	14.0	14.2(74.)	550.
5	1204.	45.	1278.	20.	20.	0.	-11.	-10.	-	1.7	1.5(78.)	3920.
6	1298.	62.	1310.	20.	20.	0.	-13.	-12.	-	1.7	1.6(80.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
95	SENW 23 1S 3W	993	948	1.30	45.	2810.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	80.	240.	50.	45.	0.	-3.	5.	-	5.4	6.2(65.)	1130.
2	250.	40.	320.	60.	40.	0.	14.	22.	-	6.7	7.4(67.)	1090.
3	390.	35.	425.	50.	32.	0.	19.	28.	-	8.8	9.5(69.)	850.
4	500.	40.	660.	40.	26.	0.	25.	25.	-	7.7	8.1(71.)	960.

5	710.	25.	735.	15.	37.	0.	15.	23.	-	6.7	6.8(73.)	1090.
6	780.	90.	910.	70.	36.	0.	25.	33.	-	19.0	19.1(74.)	407.
7	950.	60.	1050.	45.	30.	0.	22.	30.	-	11.8	11.5(77.)	605.
8	1100.	40.	1240.	20.	20.	0.	15.	24.	-	6.7	6.4(79.)	1090.
9	1280.	27.	1307.	13.	15.	0.	-12.	-4.	-	1.7	1.6(81.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
96	NESWSE 23 1S 3W	987	448	1.40	63.	2918.	1.39

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	68.	180.	40.	35.	0.	2.	8.	-	8.8	10.1(65.)	700.
2	270.	135.	520.	70.	40.	0.	20.	27.	-	10.8	11.3(67.)	680.
3	520.	35.	685.	45.	30.	0.	27.	37.	-	10.8	11.2(72.)	680.
4	770.	150.	1250.	60.	37.	0.	20.	27.	-	10.8	10.5(74.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
97	SWNENESW 24 1S 3W	0	948	1.56	660.	5653.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	50.	320.	35.	34.	0.	3.	7.	-	16.3	18.4(66.)	375.
2	355.	120.	608.	50.	33.	0.	-6.	-2.	-	2.5	2.7(68.)	2730.
3	670.	80.	780.	60.	35.	0.	-7.	-3.	-	2.1	2.1(72.)	3280.
4	843.	70.	938.	60.	40.	0.	-10.	-5.	-	2.1	2.1(74.)	3280.
5	960.	50.	1010.	75.	40.	0.	-9.	-5.	-	2.1	2.0(75.)	3280.
6	1050.	30.	1110.	50.	35.	0.	7.	11.	-	4.8	5.9(76.)	1780.
7	1120.	50.	1213.	30.	22.	0.	-10.	-5.	-	2.1	2.0(77.)	3280.
8	1252.	22.	1274.	10.	11.	0.	-15.	-11.	-	1.5	1.4(79.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
98	SESE 25 1S 3W	1049	349	1.40	82.	2625.	1.39

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	50.	210.	50.	35.	0.	16.	23.	-	FRESH	FRESH	FRESH
2	240.	35.	312.	50.	34.	0.	-4.	3.	-	4.9	4.9(67.)	1400.
3	348.	14.	362.	35.	35.	0.	14.	22.	-	FRESH	FRESH	FRESH
4	552.	26.	576.	50.	35.	0.	-9.	15.	-	4.9	5.1(71.)	1460.
5	593.	20.	670.	30.	30.	0.	-6.	0.	-	2.1	2.1(72.)	3280.
6	732.	72.	850.	70.	45.	0.	-16.	-9.	-	1.5	1.5(74.)	4400.
7	875.	71.	980.	50.	35.	0.	-11.	-4.	-	1.7	1.7(76.)	3920.
8	1005.	34.	1050.	50.	35.	0.	-6.	0.	-	2.1	2.0(77.)	3280.
9	1120.	35.	1246.	30.	30.	0.	10.	17.	-	4.9	4.7(79.)	1460.
10	1325.	20.	1345.	8.	8.	0.	-10.	-5.	-	2.1	1.9(82.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
99	NENENE 25 1S 3W	1014	877	0.85	366.	2550.	1.63

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	400.	180.	830.	50.	37.	0.	-6.	10.	-	1.7	1.8(70.)	3920.

2	990.	32.	1040.	36.	30.	0.	-7.	21.	-	3.2	3.0(80.)	2180.
3	1080.	20.	1100.	12.	20.	0.	-17.	-1.	-	1.1	1.1(81.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
100	NESWSENW 25 1S 3W	1071	1066	1.50	326.	2800.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	350.	85.	465.	45.	45.	0.	6.	11.	-	4.0	4.3(68.)	1780.
2	530.	20.	620.	30.	30.	0.	-6.	-1.	-	2.1	2.2(71.)	3280.
3	640.	40.	700.	70.	47.	0.	-10.	-5.	-	2.1	2.1(73.)	3280.
4	838.	80.	1092.	70.	45.	0.	-13.	-8.	-	1.5	1.5(75.)	4400.
5	1040.	95.	1270.	70.	45.	0.	-10.	-5.	-	2.1	2.0(78.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
101	NWSWNW 27 1S 3W	1061	253	1.78	293.	7324.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	40.	400.	60.	35.	0.	10.	10.	-	5.3	5.9(67.)	1350.
2	460.	20.	480.	20.	15.	0.	-15.	-15.	-	1.5	1.5(68.)	4400.
3	590.	62.	760.	22.	17.	0.	5.	5.	-	4.0	4.3(70.)	1780.
4	783.	22.	802.	30.	30.	0.	10.	11.	-	5.3	5.5(72.)	1350.
5	890.	35.	925.	70.	25.	0.	20.	21.	-	11.8	12.1(73.)	605.
6	980.	85.	1092.	55.	25.	0.	15.	15.	-	7.7	7.8(74.)	960.
7	1125.	40.	1240.	32.	20.	0.	5.	5.	-	4.0	4.0(76.)	1780.
8	1380.	20.	1400.	12.	16.	0.	-22.	-22.	-	1.4	1.3(78.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
102	SESWSW 28 1S 3W	1102	351	1.45	156.	2729.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	70.	240.	70.	35.	0.	5.	11.	-	18.7	21.1(66.)	330.
2	260.	45.	410.	50.	35.	0.	-5.	1.	-	4.4	4.9(67.)	1400.
3	422.	28.	450.	17.	27.	0.	-35.	-29.	-	0.7	0.7(69.)	9400.
4	460.	55.	590.	30.	33.	0.	-20.	-14.	-	1.4	1.4(70.)	4850.
5	743.	28.	807.	50.	40.	0.	1.	7.	-	3.2	3.2(74.)	2180.
6	850.	30.	910.	40.	35.	0.	-7.	-1.	-	2.1	2.0(75.)	3280.
7	930.	85.	1080.	50.	36.	0.	10.	16.	-	4.9	4.8(77.)	1460.
8	1120.	85.	1230.	50.	35.	0.	-8.	-2.	-	2.1	1.9(79.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
103	NESENW 28 1S 3W	1060	949	1.35	164.	6507.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	75.	315.	45.	20.	0.	-5.	3.	-	4.4	5.0(66.)	1400.
2	340.	85.	560.	20.	15.	0.	-12.	-4.	-	1.7	1.9(67.)	3920.
3	580.	40.	822.	15.	12.	0.	-6.	1.	-	2.1	2.2(70.)	3280.
4	850.	170.	1160.	30.	20.	0.	8.	15.	-	4.6	4.7(73.)	1540.
5	1170.	50.	1220.	22.	15.	0.	-5.	3.	-	2.5	2.4(77.)	2730.

6	1285.	25.	1310.	11.	15.	0.	-20.	-12.	-	1.4	1.3(78.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
104	SWNENE 28 1S 3W	1057	1053	1.66	282.	7043.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	92.	500.	30.	17.	0.	-4.	-2.	-	5.4	5.0(67.)	1130.
2	740.	30.	832.	30.	15.	0.	3.	5.	-	3.8	3.9(71.)	1860.
3	900.	50.	960.	40.	17.	0.	15.	17.	-	7.2	7.4(73.)	1010.
4	1013.	65.	1100.	50.	18.	0.	20.	22.	-	11.8	11.9(74.)	805.
5	1150.	30.	1180.	50.	18.	0.	12.	14.	-	5.5	5.5(76.)	1300.
6	1203.	25.	1250.	20.	18.	0.	-4.	-2.	-	2.6	2.6(76.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
105	SWSWNE 29 1S 3W	1066	752	2.13	330.	4400.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	70.	450.	15.	13.	0.	-31.	-35.	-	1.0	1.1(68.)	6200.
2	460.	100.	700.	20.	15.	0.	-15.	-19.	-	1.5	1.6(69.)	4400.
3	790.	110.	1023.	45.	25.	0.	14.	10.	-	7.7	7.9(73.)	960.
4	1040.	50.	1110.	45.	23.	0.	19.	17.	-	11.8	11.7(76.)	605.
5	1180.	45.	1235.	25.	22.	0.	-3.	-7.	-	2.6	2.6(77.)	2590.
6	1270.	13.	1283.	15.	15.	0.	-26.	-30.	-	1.1	1.1(78.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
106	SENWNW 29 1S 3W	1002	1053	1.70	162.	3666.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	50.	210.	35.	35.	0.	-8.	-6.	-	2.8	3.2(65.)	2200.
2	335.	60.	430.	10.	12.	0.	-22.	-20.	-	1.4	1.5(68.)	4600.
3	440.	115.	585.	16.	14.	0.	-10.	-8.	-	2.8	3.0(69.)	2200.
4	670.	60.	790.	30.	20.	0.	10.	12.	-	5.5	5.5(72.)	1350.
5	810.	115.	1115.	45.	25.	0.	15.	17.	-	7.2	7.3(73.)	1010.
6	1140.	40.	1190.	22.	17.	0.	-2.	-0.	-	2.6	2.6(77.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
107	NENESW 29 1S 3W	1057	952	2.28	96.	3667.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	215.	92.	370.	40.	25.	0.	-12.	-17.	-	2.8	3.2(66.)	2200.
2	370.	45.	433.	12.	15.	0.	-35.	-40.	-	0.8	0.9(68.)	7800.
3	440.	100.	618.	13.	14.	0.	-24.	-29.	-	1.4	1.5(68.)	4600.
4	700.	26.	726.	16.	16.	0.	-16.	-21.	-	1.5	1.6(71.)	4400.
5	790.	55.	950.	30.	30.	0.	-12.	-17.	-	2.1	2.1(72.)	3280.
6	960.	65.	1070.	35.	30.	0.	3.	-2.	-	4.0	4.0(74.)	1780.
7	1108.	62.	1250.	30.	23.	0.	-10.	-15.	-	2.1	2.0(76.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
108	SESWSE 29 1S 3W	1076	850	1.62	215.	6019.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	60.	360.	18.	12.	0.	-6.	-3.	-	4.4	4.3(66.)	1400.
2	380.	20.	400.	27.	14.	0.	-25.	-22.	-	1.1	1.3(68.)	5400.
3	447.	30.	477.	12.	12.	0.	-33.	-30.	-	0.8	0.9(69.)	7600.
4	690.	30.	720.	13.	15.	0.	-22.	-19.	-	1.4	1.4(72.)	4850.
5	780.	20.	800.	17.	17.	0.	7.	10.	-	4.0	4.1(73.)	1780.
6	910.	38.	998.	40.	22.	0.	15.	18.	-	7.2	7.3(74.)	1010.
7	1035.	50.	1130.	30.	23.	0.	5.	8.	-	4.0	4.0(76.)	1780.
8	1188.	22.	1210.	20.	17.	0.	-12.	-9.	-	1.7	1.7(77.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
109	NESWSW 30 1S 3W	0	551	1.45	203.	3650.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	250.	30.	280.	65.	30.	0.	12.	18.	-	FRESH	FRESH	FRESH
2	355.	53.	510.	10.	10.	0.	-30.	-24.	-	0.8	0.9(68.)	7800.
3	565.	45.	665.	5.	10.	0.	-40.	-35.	-	0.7	0.7(70.)	9400.
4	790.	40.	830.	32.	20.	0.	9.	15.	-	4.9	5.0(73.)	1460.
5	920.	20.	940.	17.	14.	0.	-7.	-1.	-	2.1	2.1(75.)	3280.
6	960.	55.	1020.	35.	29.	0.	15.	21.	-	7.2	7.2(75.)	1010.
7	1070.	65.	1180.	25.	17.	0.	10.	16.	-	4.9	4.8(77.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
110	SWNWSE 30 1S 3W	1026	954	2.01	190.	4179.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	90.	190.	100.	50.	0.	-3.	-5.	-	5.4	5.2(65.)	1130.
2	210.	40.	250.	100.	34.	0.	8.	5.	-	FRESH	FRESH	FRESH
3	334.	115.	605.	10.	10.	0.	-25.	-28.	-	1.1	1.3(67.)	5400.
4	690.	42.	732.	15.	14.	0.	-20.	-23.	-	1.4	1.4(72.)	4850.
5	780.	50.	940.	50.	25.	0.	10.	8.	-	5.5	5.7(73.)	1300.
6	980.	30.	1010.	50.	29.	0.	18.	15.	-	10.0	10.0(75.)	750.
7	1070.	32.	1180.	25.	20.	0.	11.	9.	-	5.5	5.4(76.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
111	NWSENE 30 1S 3W	1008	954	1.72	143.	4471.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	60.	255.	50.	35.	0.	-6.	-5.	-	4.4	5.0(65.)	1400.
2	309.	47.	395.	10.	10.	0.	-32.	-31.	-	0.8	0.9(67.)	7800.
3	465.	40.	570.	12.	11.	0.	-20.	-19.	-	1.4	1.4(69.)	4600.
4	605.	60.	710.	13.	13.	0.	-10.	-9.	-	2.1	2.2(71.)	3280.
5	763.	45.	825.	30.	22.	0.	10.	11.	-	5.3	5.4(73.)	1350.
6	885.	96.	1040.	35.	22.	0.	16.	17.	-	7.7	7.7(75.)	960.
7	1070.	62.	1190.	35.	20.	0.	11.	12.	-	5.5	5.4(77.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
112	SE¼NW 30 1S 3W	1024	755	1.25	135.	3807.	1.43

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	58.	198.	100.	40.	0.	1.	10.	-	8.8	10.0(66.)	700.
2	210.	80.	320.	25.	30.	0.	11.	20.	-	FRESH	FRESH	FRESH
3	340.	55.	465.	10.	10.	0.	-28.	-19.	-	1.0	1.1(68.)	6200.
4	550.	45.	685.	10.	10.	0.	-18.	-9.	-	1.4	1.4(71.)	4600.
5	790.	80.	1000.	45.	23.	0.	16.	25.	-	7.2	7.2(75.)	1010.
6	1030.	28.	1058.	45.	23.	0.	19.	29.	-	8.8	8.5(78.)	850.
7	1108.	32.	1140.	40.	21.	0.	11.	20.	-	4.9	4.7(79.)	1460.
8	1180.	50.	1230.	20.	15.	0.	-10.	-1.	-	1.7	1.6(80.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
113	SWSWSE 31 1S 3W	1087	152	1.42	124.	5001.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	85.	230.	100.	40.	0.	-5.	1.	-	4.4	5.0(65.)	1400.
2	380.	60.	450.	30.	18.	0.	-10.	-4.	-	2.6	3.1(68.)	2200.
3	460.	75.	570.	15.	15.	0.	-26.	-20.	-	1.0	1.1(69.)	6200.
4	590.	50.	650.	6.	11.	0.	-46.	-40.	-	0.5	0.5(70.)	12500.
5	750.	65.	895.	30.	17.	0.	16.	22.	-	7.7	8.0(72.)	960.
6	960.	30.	990.	35.	17.	0.	2.	8.	-	3.2	3.2(75.)	2180.
7	1030.	35.	1065.	50.	22.	0.	14.	20.	-	6.7	6.7(75.)	1090.
8	1120.	60.	1210.	20.	16.	0.	-5.	1.	-	2.5	2.5(76.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
114	SWSWSW 31 1S 3W	1108	650	1.46	103.	4840.	0.96

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	115.	285.	100.	50.	0.	-11.	-6.	-	1.9	2.2(65.)	3200.
2	320.	30.	460.	50.	25.	0.	3.	9.	-	8.2	9.8(67.)	700.
3	510.	30.	575.	14.	14.	0.	-22.	-17.	-	1.1	1.3(68.)	5400.
4	610.	40.	668.	12.	11.	0.	-45.	-40.	-	0.5	0.5(69.)	12500.
5	800.	70.	935.	14.	14.	0.	-20.	-15.	-	1.4	1.4(71.)	4850.
6	1100.	30.	1130.	40.	20.	0.	15.	21.	-	7.2	7.7(74.)	1010.
7	1138.	25.	1228.	16.	15.	0.	-9.	-4.	-	2.1	2.1(74.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
115	NWSWSW 32 1S 3W	1064	354	0.98	337.	6498.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	337.	83.	420.	15.	13.	0.	-15.	-1.	-	1.6	1.8(67.)	3750.
2	449.	20.	460.	10.	10.	0.	-30.	-16.	-	0.8	0.9(68.)	7800.
3	545.	40.	612.	7.	10.	0.	-45.	-31.	-	0.4	0.4(69.)	18000.
4	740.	106.	947.	25.	15.	0.	-10.	4.	-	1.3	1.5(71.)	4400.
5	950.	55.	1098.	35.	20.	0.	11.	25.	-	4.6	4.7(73.)	1540.
6	1120.	55.	1200.	45.	22.	0.	13.	27.	-	4.9	4.9(75.)	1460.

7	1205.	35.	1258.	12.	12.	0.	-20.	-5.	-	1.1	1.1(76.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
116	S4NWNW 32 1S 3W	1086	367	1.59	367.	7618.	1.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	367.	40.	420.	10.	10.	0.	-20.	-17.	-	1.4	1.5(67.)	4600.
2	480.	110.	630.	10.	8.	0.	-30.	-27.	-	1.0	1.1(68.)	6200.
3	735.	25.	760.	15.	13.	0.	-15.	-12.	-	1.5	1.6(71.)	4400.
4	790.	35.	840.	18.	13.	0.	-7.	-4.	-	2.1	2.1(72.)	3280.
5	900.	38.	950.	17.	15.	0.	2.	5.	-	3.2	3.3(73.)	2180.
6	1005.	80.	1190.	40.	12.	0.	15.	18.	-	7.2	7.3(74.)	1010.
7	1234.	28.	1270.	15.	12.	0.	-10.	-7.	-	2.1	2.0(76.)	3280.
8	1300.	10.	1310.	10.	10.	0.	-32.	-30.	-	0.8	0.8(77.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
117	SWNWSE 32 1S 3W	0	1052	1.50	333.	7349.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	380.	60.	520.	12.	11.	0.	-19.	-14.	-	1.4	1.5(68.)	4600.
2	540.	35.	610.	10.	10.	0.	-30.	-25.	-	0.8	0.9(70.)	7800.
3	710.	95.	925.	30.	17.	0.	7.	12.	-	4.0	4.1(72.)	1780.
4	980.	60.	1140.	45.	22.	0.	11.	16.	-	5.3	5.3(75.)	1350.
5	1198.	37.	1252.	22.	16.	0.	-8.	-3.	-	2.1	2.0(78.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
118	SWSWNE 32 1S 3W	1101	253	1.72	362.	6921.	0.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	362.	60.	460.	20.	17.	0.	-18.	-17.	-	1.6	1.8(67.)	3750.
2	480.	60.	613.	10.	10.	0.	-29.	-28.	-	1.0	1.1(68.)	6200.
3	390.	55.	790.	30.	16.	0.	-3.	-2.	-	2.6	2.9(67.)	2590.
4	800.	30.	830.	30.	15.	0.	5.	5.	-	4.0	4.2(71.)	1780.
5	850.	40.	900.	25.	13.	0.	-5.	-4.	-	2.5	2.6(71.)	2730.
6	615.	23.	938.	15.	13.	0.	1.	2.	-	3.2	3.4(69.)	2180.
7	982.	37.	1022.	45.	20.	0.	11.	12.	-	5.5	5.7(73.)	1300.
8	1125.	45.	1170.	45.	20.	0.	8.	9.	-	4.6	4.7(74.)	1540.
9	1180.	35.	1268.	15.	13.	0.	-10.	-9.	-	2.1	2.1(74.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
119	SWSESW 33 1S 3W	1059	852	1.76	350.	6409.	0.88

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	440.	40.	500.	8.	10.	0.	-38.	-38.	-	0.7	0.7(67.)	9400.
2	620.	40.	660.	30.	17.	0.	-4.	-3.	-	2.6	2.9(69.)	2590.
3	700.	35.	790.	25.	17.	0.	2.	3.	-	3.2	3.4(70.)	2180.
4	950.	90.	1110.	45.	20.	0.	6.	7.	-	4.0	4.2(72.)	1780.
5	1128.	22.	1150.	13.	13.	0.	-10.	-9.	-	2.1	2.1(73.)	3280.

6	1203.	17.	1220.	8.	10.	0.	-20.	-19.	-	1.4	1.4(74.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
120	SENENW 33 1S 3W	1077	549	1.48	48.	3412.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	48.	92.	190.	60.	50.	0.	2.	7.	-	8.8	10.1(64.)	700.
2	238.	14.	252.	40.	28.	0.	13.	19.	-	FRESH	FRESH	FRESH
3	322.	48.	370.	45.	30.	0.	31.	31.	-	34.0	37.4(68.)	238.
4	480.	50.	565.	18.	18.	0.	5.	10.	-	4.0	4.3(69.)	1760.
5	735.	110.	1125.	40.	32.	0.	36.	35.	-	FRESH	FRESH	FRESH
6	1193.	17.	1210.	20.	20.	0.	11.	15.	-	5.3	5.1(78.)	1350.
7	1290.	16.	1306.	13.	13.	0.	-12.	-7.	-	1.7	1.6(80.)	3920.
8	1340.	28.	1368.	13.	13.	0.	-20.	-15.	-	1.4	1.3(80.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
121	NWNWNW 33 1S 3W	1047	480	1.30	50.	1600.	1.78

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	50.	80.	150.	50.	26.	0.	-9.	-1.	-	2.8	3.2(64.)	2200.
2	170.	40.	230.	45.	25.	0.	-6.	2.	-	2.8	3.1(67.)	2200.
3	250.	37.	302.	50.	28.	0.	5.	15.	-	16.3	17.8(68.)	375.
4	350.	30.	380.	20.	17.	0.	-12.	-4.	-	1.9	2.1(70.)	3200.
5	585.	38.	690.	37.	25.	0.	15.	23.	-	6.7	6.8(74.)	1090.
6	755.	30.	845.	35.	25.	0.	7.	15.	-	4.0	3.9(77.)	1780.
7	920.	55.	980.	40.	30.	0.	10.	18.	-	4.9	4.6(80.)	1460.
8	1030.	15.	1045.	12.	12.	0.	-12.	-4.	-	1.5	1.4(82.)	4400.
9	1110.	20.	1130.	15.	15.	0.	-15.	-7.	-	1.5	1.4(83.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
122	NWNENE 33 1S 3W	0	1148	1.64	43.	3476.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	43.	98.	160.	60.	50.	0.	-2.	1.	-	5.4	5.2(64.)	1130.
2	230.	30.	260.	50.	36.	0.	-5.	-2.	-	4.4	4.9(66.)	1400.
3	297.	40.	380.	50.	32.	0.	-4.	-1.	-	5.4	6.0(67.)	1130.
4	415.	75.	585.	20.	25.	0.	-6.	-3.	-	4.4	4.8(69.)	1400.
5	645.	15.	660.	25.	25.	0.	5.	8.	-	4.0	4.2(71.)	1780.
6	825.	150.	1109.	40.	30.	0.	15.	18.	-	7.2	7.3(74.)	1010.
7	1140.	20.	1233.	20.	30.	0.	-10.	-5.	-	2.1	2.0(77.)	3280.
8	1298.	18.	1345.	12.	16.	0.	-26.	-23.	-	1.1	1.1(79.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
123	NESWSW 34 1S 3W	1063	550	1.62	70.	3405.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	102.	30.	212.	50.	50.	0.	3.	6.	-	16.3	19.7(65.)	375.
2	242.	35.	300.	50.	50.	0.	12.	15.	-	FRESH	FRESH	FRESH

3	410.	45.	490.	25.	27.	0.	-9.	-1.	-	5.4	5.9(68.)	1130.
4	580.	100.	868.	40.	35.	0.	12.	15.	-	5.5	5.9(70.)	1300.
5	900.	27.	990.	35.	32.	0.	8.	11.	-	4.5	4.7(74.)	1540.
6	1180.	36.	1250.	15.	20.	0.	-27.	-24.	-	1.0	1.0(77.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
124	SESWSE 34 1S 3W	1073	751	1.89	179.	4078.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	179.	105.	512.	40.	22.	0.	7.	6.	-	FRESH	FRESH	FRESH
2	600.	45.	728.	35.	27.	0.	-3.	-4.	-	2.6	2.8(72.)	2590.
3	770.	70.	900.	40.	32.	0.	4.	3.	-	4.0	4.0(74.)	1788.
4	920.	70.	1000.	50.	30.	0.	13.	12.	-	6.7	6.6(76.)	1098.
5	1052.	40.	1150.	30.	20.	0.	-10.	-11.	-	2.1	2.0(78.)	3280.
6	1185.	65.	1340.	25.	25.	0.	-22.	-23.	-	1.4	1.3(80.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
125	NENWNW 34 1S 3W	0	1152	1.49	109.	3950.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	145.	80.	350.	50.	50.	0.	7.	12.	-	18.7	21.2(65.)	330.
2	370.	80.	555.	25.	25.	0.	15.	20.	-	7.2	7.8(68.)	1010.
3	590.	77.	770.	30.	23.	0.	20.	25.	-	10.8	11.3(71.)	680.
4	795.	160.	1030.	50.	35.	0.	34.	39.	-	FRESH	FRESH	FRESH
5	1080.	40.	1160.	40.	25.	0.	25.	25.	-	10.8	10.4(78.)	680.
6	1285.	55.	1370.	13.	15.	0.	-10.	-5.	-	2.1	1.9(81.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
126	NWNESE 35 1S 3W	1059	757	1.93	107.	3595.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	100.	270.	50.	50.	0.	-9.	-11.	-	2.8	3.2(65.)	2200.
2	312.	44.	382.	50.	50.	0.	-5.	-7.	-	2.5	2.8(67.)	2730.
3	415.	33.	448.	47.	47.	0.	1.	-1.	-	3.2	3.5(68.)	2180.
4	475.	55.	700.	45.	45.	0.	10.	8.	-	5.5	6.0(69.)	1300.
5	740.	20.	760.	37.	37.	0.	16.	15.	-	8.8	9.2(72.)	850.
6	940.	110.	1135.	55.	55.	0.	20.	16.	-	11.8	12.0(74.)	605.
7	1150.	40.	1280.	50.	50.	0.	25.	25.	-	FRESH	FRESH	FRESH
8	1360.	55.	1450.	35.	35.	0.	10.	9.	-	3.3	3.1(78.)	1350.
9	1470.	20.	1490.	22.	22.	0.	-5.	-7.	-	2.6	2.5(80.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
127	SWNWSW 35 1S 3W	1067	353	1.23	182.	4074.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	182.	50.	245.	45.	25.	0.	1.	11.	-	8.8	9.9(66.)	700.
2	266.	23.	300.	50.	28.	0.	15.	25.	-	FRESH	FRESH	FRESH
3	390.	30.	420.	50.	30.	0.	25.	25.	-	FRESH	FRESH	FRESH

4	440.	45.	570.	30.	25.	0.	3.	13.	-	3.2	3.4(70.)	2180.
5	630.	40.	730.	35.	20.	0.	15.	25.	-	5.7	6.9(72.)	1090.
6	830.	38.	880.	35.	22.	0.	25.	25.	-	6.7	5.7(75.)	1090.
7	935.	50.	988.	70.	30.	0.	32.	32.	-	11.8	11.6(77.)	605.
8	1000.	40.	1090.	30.	25.	0.	20.	30.	-	10.0	9.7(78.)	750.
9	1245.	95.	1433.	35.	23.	0.	-12.	-2.	-	1.5	1.4(81.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
128	NWNENW 35 1S 3W	1092	757	2.01	89.	3517.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	55.	220.	50.	50.	0.	-15.	-18.	-	1.6	1.9(65.)	3750.
2	245.	70.	360.	50.	50.	0.	-13.	-16.	-	1.9	2.2(66.)	3200.
3	365.	55.	502.	45.	40.	0.	10.	7.	-	FRESH	FRESH	FRESH
4	580.	37.	652.	30.	30.	0.	7.	4.	-	4.6	4.9(70.)	1540.
5	670.	30.	740.	30.	30.	0.	-10.	-13.	-	2.1	2.2(71.)	3280.
6	850.	23.	890.	25.	25.	0.	-5.	-8.	-	2.6	2.7(73.)	2590.
7	905.	75.	1020.	35.	35.	0.	-15.	-18.	-	1.5	1.5(74.)	4400.
8	1060.	73.	1234.	43.	43.	0.	10.	7.	-	5.5	5.5(75.)	1300.
9	1240.	25.	1265.	30.	32.	0.	-1.	-4.	-	3.2	3.1(77.)	2180.
10	1355.	70.	1435.	30.	30.	0.	-10.	-13.	-	2.1	2.0(79.)	3280.
11	1475.	30.	1505.	31.	31.	0.	-12.	-15.	-	2.1	1.9(80.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
129	SWSWNE 35 1S 3W	1101	1179	1.53	50.	3629.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	50.	138.	218.	75.	75.	0.	-5.	-1.	-	4.4	5.1(64.)	1400.
2	238.	90.	382.	70.	50.	0.	10.	14.	-	FRESH	FRESH	FRESH
3	400.	80.	500.	100.	60.	0.	16.	20.	-	7.7	8.4(69.)	960.
4	570.	65.	658.	40.	35.	0.	20.	24.	-	10.8	11.4(71.)	680.
5	672.	70.	870.	40.	35.	0.	17.	21.	-	8.2	8.5(72.)	900.
6	990.	92.	1150.	100.	55.	0.	15.	19.	-	7.2	7.1(76.)	1010.
7	1180.	50.	1260.	50.	50.	0.	20.	24.	-	10.8	10.4(78.)	680.
8	1290.	35.	1420.	30.	30.	0.	10.	14.	-	4.9	4.6(80.)	1460.
9	1538.	22.	1550.	16.	16.	0.	-6.	-2.	-	2.5	2.3(83.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
130	SWSWNW 36 1S 3W	1087	757	1.89	320.	3359.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	330.	100.	510.	50.	50.	0.	-10.	-11.	-	2.8	3.1(67.)	2200.
2	545.	20.	560.	45.	45.	0.	10.	9.	-	5.5	5.9(70.)	1300.
3	640.	55.	710.	35.	35.	0.	13.	12.	-	6.7	7.0(71.)	1090.
4	740.	32.	772.	45.	45.	0.	18.	17.	-	10.0	10.4(72.)	750.
5	790.	25.	825.	30.	30.	0.	-7.	-8.	-	2.1	2.1(73.)	3280.
6	938.	60.	1005.	50.	50.	0.	-12.	-13.	-	1.7	1.7(75.)	3920.
7	1035.	60.	1095.	50.	50.	0.	-15.	-16.	-	1.5	1.5(76.)	4400.
8	1100.	125.	1350.	50.	50.	0.	-10.	-11.	-	2.1	2.0(76.)	3280.
9	1390.	90.	1480.	30.	30.	0.	-15.	-16.	-	1.5	1.4(80.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
131	SESENWNE 5 2S 2W	0	1248	1.23	100.	2126.	1.72

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	95.	458.	50.	50.	0.	-7.	3.	-	2.1	2.3(66.)	3280.
2	495.	20.	528.	50.	45.	0.	-8.	1.	-	2.1	2.1(72.)	3280.
3	555.	108.	867.	50.	50.	0.	-10.	-0.	-	1.7	1.7(73.)	3920.
4	908.	22.	930.	17.	23.	0.	-22.	-12.	-	1.1	1.1(79.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
132	NESENESE 6 2S 2W	0	1051	1.65	63.	1488.	1.78

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	38.	220.	50.	50.	0.	4.	6.	-	16.3	18.6(65.)	375.
2	280.	17.	297.	45.	50.	0.	23.	27.	-	22.0	23.9(68.)	357.
3	380.	15.	395.	30.	40.	0.	12.	15.	-	5.5	5.8(70.)	1300.
4	428.	50.	542.	50.	50.	0.	9.	11.	-	4.9	5.1(71.)	1460.
5	590.	115.	840.	50.	50.	0.	12.	14.	-	5.5	5.5(74.)	1300.
6	950.	42.	1010.	50.	50.	0.	23.	25.	-	17.0	15.9(80.)	458.
7	1050.	20.	1070.	25.	40.	0.	10.	13.	-	5.3	4.9(82.)	1350.
8	1096.	22.	1120.	9.	20.	0.	-10.	-8.	-	2.1	1.9(83.)	3280.
9	1190.	28.	1218.	5.	10.	0.	-30.	-28.	-	1.0	0.9(85.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
133	NWSENE 6 2S 2W	1049	448	1.66	51.	1903.	1.66

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	70.	110.	250.	70.	60.	0.	-23.	-21.	-	1.1	1.3(65.)	5400.
2	280.	30.	320.	50.	50.	0.	-15.	-13.	-	1.5	1.6(68.)	4400.
3	410.	10.	420.	50.	50.	0.	-25.	-28.	-	1.0	1.1(70.)	6500.
4	520.	37.	570.	50.	50.	0.	-10.	-8.	-	2.1	2.1(72.)	3280.
5	610.	80.	730.	70.	50.	0.	-15.	-13.	-	1.5	1.5(74.)	4400.
6	755.	73.	870.	70.	55.	0.	-25.	-23.	-	1.1	1.1(76.)	5700.
7	890.	43.	950.	60.	60.	0.	-22.	-20.	-	1.4	1.3(78.)	4850.
8	965.	112.	1090.	60.	50.	0.	-18.	-15.	-	1.5	1.4(79.)	4400.
9	1110.	52.	1180.	40.	50.	0.	-25.	-25.	-	1.1	1.1(82.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
134	SWSWSW 6 2S 2W	1048	674	1.60	259.	4191.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	270.	60.	330.	40.	40.	0.	-6.	-3.	-	2.5	2.8(67.)	2730.
2	360.	30.	460.	50.	50.	0.	-1.	2.	-	2.6	2.9(69.)	2590.
3	510.	105.	830.	50.	50.	0.	5.	8.	-	4.0	4.2(71.)	1780.
4	850.	100.	1015.	70.	60.	0.	-6.	-3.	-	2.5	2.5(75.)	2730.
5	1075.	20.	1095.	45.	40.	0.	2.	5.	-	3.2	3.1(79.)	2180.

6	1110.	40.	1200.	37.	37.	0.	-6.	-3.	-	2.5	2.4(79.)	2730.
7	1230.	42.	1280.	12.	20.	0.	-22.	-19.	-	1.4	1.3(81.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
135	SWSWNW 6 2S 2W	1062	1056	0.93	75.	3800.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	85.	140.	320.	50.	22.	0.	20.	35.	-	7.7	8.8(65.)	960.
2	380.	145.	625.	100.	20.	0.	42.	42.	-	17.0	18.5(68.)	458.
3	670.	110.	875.	50.	22.	0.	35.	35.	-	7.7	8.0(72.)	960.
4	920.	55.	975.	100.	22.	0.	30.	30.	-	5.3	5.3(75.)	1350.
5	998.	55.	1061.	100.	20.	0.	36.	36.	-	7.7	7.6(76.)	960.
6	1090.	40.	1130.	70.	18.	0.	49.	51.	-	FRESH	FRESH	FRESH
7	1172.	30.	1220.	40.	15.	0.	40.	41.	-	11.8	11.4(78.)	605.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
136	NWSENW 7 2S 2W	1053	947	1.38	107.	2807.	1.48

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	175.	35.	255.	100.	50.	0.	-5.	2.	-	4.4	4.9(66.)	1400.
2	290.	50.	430.	100.	50.	0.	15.	22.	-	7.2	7.9(68.)	1010.
3	505.	25.	530.	90.	45.	0.	10.	17.	-	5.3	5.6(71.)	1350.
4	580.	75.	790.	100.	55.	0.	15.	22.	-	7.2	7.5(72.)	1010.
5	820.	180.	1070.	90.	50.	0.	10.	17.	-	4.9	4.9(76.)	1460.
6	1145.	17.	1175.	40.	40.	0.	-9.	-3.	-	2.1	1.9(80.)	3280.
7	1195.	40.	1235.	17.	19.	0.	-29.	-22.	-	1.0	0.9(81.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
137	NWSWSE 7 2S 2W	1020	750	2.06	190.	3301.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	30.	320.	45.	40.	0.	15.	12.	-	8.2	9.2(66.)	900.
2	445.	20.	465.	50.	34.	0.	20.	18.	-	14.0	15.1(69.)	550.
3	495.	52.	590.	50.	40.	0.	15.	12.	-	8.2	8.7(70.)	900.
4	680.	150.	925.	100.	52.	0.	14.	11.	-	7.7	8.0(72.)	960.
5	984.	31.	1017.	50.	30.	0.	20.	17.	-	13.0	12.8(76.)	585.
6	1072.	51.	1123.	50.	31.	0.	14.	11.	-	7.7	7.5(77.)	960.
7	1173.	21.	1194.	7.	14.	0.	-24.	-27.	-	1.4	1.3(79.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
138	NENENE 7 2S 2W	0	445	1.23	107.	3082.	1.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	128.	420.	100.	50.	0.	15.	25.	-	6.7	7.6(65.)	1090.
2	504.	125.	702.	100.	50.	0.	10.	20.	-	4.9	5.2(70.)	1460.
3	712.	21.	733.	90.	36.	0.	15.	25.	-	7.2	7.4(73.)	1010.
4	760.	35.	808.	70.	36.	0.	20.	30.	-	10.0	10.2(73.)	750.
5	922.	18.	940.	30.	25.	0.	2.	12.	-	3.2	3.2(76.)	2180.

6	1005.	18.	1023.	17.	20.	0.	-15.	-6.	-	1.5	1.5(77.) 4400.
7	1080.	23.	1103.	6.	15.	0.	-44.	-34.	-	0.5	0.5(78.) 12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
139	NWSWNE 8 2S 2W	0	946	1.46	138.	2797.	1.45

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RwFORM(TEMP F)	TDS
1	140.	40.	180.	60.	40.	0.	-15.	-9.	-	1.6	1.9(66.)	3750.
2	280.	52.	482.	50.	35.	0.	-10.	-4.	-	2.1	2.3(68.)	3280.
3	545.	150.	610.	100.	35.	0.	-15.	-9.	-	1.5	1.6(71.)	4400.
4	640.	95.	770.	70.	50.	0.	-17.	-11.	-	1.5	1.5(73.)	4400.
5	830.	20.	850.	50.	50.	0.	-22.	-18.	-	1.1	1.1(76.)	5760.
6	860.	50.	920.	70.	50.	0.	-17.	-11.	-	1.5	1.5(76.)	4400.
7	930.	38.	968.	90.	48.	0.	-15.	-9.	-	1.5	1.5(77.)	4400.
8	1015.	23.	1087.	50.	40.	0.	-10.	-5.	-	1.7	1.6(78.)	3920.
9	1205.	15.	1220.	50.	50.	0.	-35.	-34.	-	0.7	0.6(81.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
140	SWSESW 8 2S 2W	0	1247	1.47	116.	2595.	2.56

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RwFORM(TEMP F)	TDS
1	135.	27.	180.	50.	45.	0.	5.	10.	-	18.7	20.7(67.)	330.
2	200.	20.	235.	40.	32.	0.	10.	16.	-	FRESH	FRESH	FRESH
3	375.	15.	402.	50.	30.	0.	12.	19.	-	FRESH	FRESH	FRESH
4	480.	40.	540.	35.	35.	0.	-1.	4.	-	2.6	2.6(76.)	2590.
5	592.	125.	770.	100.	50.	0.	-10.	-5.	-	2.1	2.0(79.)	3280.
6	795.	46.	851.	70.	48.	0.	2.	7.	-	3.2	2.9(84.)	2180.
7	870.	30.	900.	50.	35.	0.	6.	11.	-	4.0	3.5(86.)	1780.
8	933.	37.	999.	35.	35.	0.	-8.	-3.	-	2.1	1.8(87.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
141	SESESE 8 2S 2W	1032	646	1.83	107.	3110.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RwFORM(TEMP F)	TDS
1	207.	23.	230.	50.	50.	0.	5.	5.	-	18.7	20.9(66.)	330.
2	260.	23.	307.	35.	18.	0.	7.	7.	-	FRESH	FRESH	FRESH
3	410.	40.	490.	35.	47.	0.	11.	11.	-	5.5	5.9(69.)	1300.
4	600.	116.	740.	50.	25.	0.	-10.	-10.	-	2.1	2.1(72.)	3280.
5	800.	120.	920.	50.	25.	0.	8.	8.	-	4.9	4.9(75.)	1460.
6	960.	30.	1010.	50.	50.	0.	20.	20.	-	11.8	11.5(77.)	605.
7	1070.	116.	1086.	12.	16.	0.	-16.	-16.	-	1.5	1.4(78.)	4400.
8	1157.	10.	1167.	11.	11.	0.	-36.	-38.	-	0.7	0.6(80.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
142	NENENESW 9 2S 2W	0	1048	1.08	63.	2000.	1.63

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RwFORM(TEMP F)	TDS
1	105.	15.	120.	31.	31.	0.	3.	16.	-	8.8	10.0(65.)	700.

2	203.	45.	322.	50.	50.	0.	5.	18.	-	3.2	1.6(67.)	2180.
3	338.	32.	370.	40.	20.	0.	1.	13.	-	2.6	2.9(69.)	2590.
4	410.	18.	446.	35.	35.	0.	7.	20.	-	4.0	4.3(70.)	1780.
5	475.	83.	508.	50.	35.	0.	5.	17.	-	3.2	3.4(71.)	2180.
6	533.	55.	590.	100.	40.	0.	7.	19.	-	3.8	3.9(72.)	1860.
7	623.	40.	662.	35.	35.	0.	12.	25.	-	4.9	5.0(74.)	1460.
8	750.	33.	783.	15.	21.	0.	-5.	7.	-	2.1	2.0(76.)	3280.
9	805.	10.	815.	30.	30.	0.	5.	19.	-	3.8	3.7(77.)	1860.
10	832.	10.	842.	16.	16.	0.	-7.	5.	-	2.1	2.0(77.)	3280.
11	870.	23.	893.	5.	10.	0.	-30.	-18.	-	0.8	0.8(78.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
143	SWSWSE 9 2S 2W	0	746	1.48	58.	2002.	1.62

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	60.	50.	110.	45.	45.	0.	7.	12.	-	18.7	21.5(64.)	330.
2	150.	60.	220.	45.	45.	0.	3.	8.	-	8.8	9.9(66.)	700.
3	260.	10.	270.	30.	30.	0.	-3.	2.	-	2.6	2.9(68.)	2590.
4	350.	26.	376.	45.	45.	0.	-7.	-2.	-	2.1	2.2(69.)	3280.
5	410.	47.	480.	70.	50.	0.	-10.	-5.	-	2.1	2.2(70.)	3280.
6	523.	95.	650.	70.	50.	0.	-16.	-11.	-	1.5	1.6(72.)	4400.
7	660.	60.	730.	60.	50.	0.	-12.	-7.	-	1.7	1.7(74.)	3920.
8	760.	50.	825.	50.	50.	0.	-16.	-11.	-	1.5	1.5(76.)	4400.
9	860.	25.	885.	45.	45.	0.	-10.	-5.	-	2.1	2.0(77.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
144	NENENE 9 2S 2W	970	353	1.66	125.	5002.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	33.	163.	50.	47.	0.	-3.	-1.	-	5.4	6.1(65.)	1130.
2	190.	40.	230.	50.	30.	0.	-6.	-4.	-	2.5	2.8(66.)	2730.
3	285.	20.	305.	45.	32.	0.	1.	3.	-	5.2	5.5(67.)	2180.
4	390.	20.	410.	10.	13.	0.	-15.	-13.	-	1.5	1.6(68.)	4400.
5	515.	15.	530.	11.	11.	0.	-17.	-15.	-	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
145	NWNESWNW 9 2S 2W	0	1054	1.80	50.	1902.	1.39

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	95.	10.	105.	36.	36.	0.	-7.	-8.	-	2.8	3.2(65.)	2200.
2	155.	20.	175.	15.	26.	0.	-3.	-3.	-	5.4	6.1(66.)	1130.
3	210.	31.	272.	20.	40.	0.	-7.	-7.	-	2.1	2.3(66.)	3280.
4	320.	40.	390.	40.	40.	0.	-14.	-14.	-	1.5	1.6(68.)	4400.
5	418.	37.	515.	50.	50.	0.	-17.	-17.	-	1.5	1.6(69.)	4400.
6	540.	63.	630.	50.	50.	0.	-20.	-20.	-	1.4	1.4(71.)	4850.
7	680.	36.	728.	50.	50.	0.	-23.	-23.	-	1.1	1.2(73.)	5700.
8	760.	43.	810.	60.	50.	0.	-16.	-16.	-	1.5	1.5(74.)	4400.
9	893.	50.	957.	30.	35.	0.	-12.	-12.	-	1.7	1.7(76.)	3920.
10	990.	10.	1000.	25.	25.	0.	-18.	-20.	-	1.4	1.3(77.)	4850.
11	1020.	15.	1035.	11.	16.	0.	-30.	-30.	-	1.0	1.0(78.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
146	NWSWSWNW 15 2S 2W	0	551	0.89	90.	1516.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	15.	165.	40.	40.	0.	-6.	9.	-	1.9	2.2(65.)	3200.
2	200.	20.	220.	20.	40.	0.	-10.	5.	-	1.5	1.7(66.)	4400.
3	250.	104.	388.	70.	50.	0.	-12.	4.	-	1.5	1.7(66.)	4400.
4	473.	60.	540.	100.	50.	0.	-15.	1.	-	1.4	1.5(69.)	4850.
5	545.	52.	592.	70.	50.	0.	-10.	6.	-	1.5	1.5(70.)	4400.
6	625.	25.	650.	20.	25.	0.	-14.	2.	-	1.4	1.4(71.)	4850.
7	682.	10.	692.	15.	25.	0.	-35.	-25.	-	0.5	0.5(71.)	12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
147	SWSENWSW 16 2S 2W	1009	249	1.53	95.	2944.	1.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	110.	320.	50.	37.	0.	-12.	-9.	-	1.9	2.2(65.)	3200.
2	340.	40.	380.	50.	37.	0.	-5.	-1.	-	2.5	2.7(68.)	2730.
3	400.	40.	440.	50.	40.	0.	2.	6.	-	3.2	3.5(69.)	2180.
4	443.	25.	468.	50.	35.	0.	10.	15.	-	5.3	5.7(69.)	1350.
5	470.	40.	510.	50.	32.	0.	-1.	3.	-	2.6	2.8(70.)	2590.
6	650.	20.	670.	50.	42.	0.	-8.	-4.	-	2.1	2.1(72.)	3280.
7	700.	60.	810.	50.	50.	0.	-20.	-16.	-	1.4	1.4(73.)	4850.
8	830.	27.	857.	50.	50.	0.	-22.	-18.	-	1.1	1.2(74.)	5700.
9	868.	47.	915.	70.	55.	0.	-17.	-13.	-	1.5	1.5(75.)	4400.
10	1010.	8.	1018.	35.	35.	0.	5.	9.	-	4.0	3.9(77.)	1780.
11	1170.	10.	1180.	23.	23.	0.	-22.	-20.	-	1.1	1.1(79.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
148	NWSESENE 16 2S 2W	0	1048	1.74	49.	1865.	1.58

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	78.	85.	410.	40.	37.	0.	-10.	-9.	-	2.1	2.3(65.)	3280.
2	468.	105.	630.	70.	50.	0.	-15.	-14.	-	1.5	1.6(71.)	4400.
3	670.	20.	690.	50.	37.	0.	-10.	-10.	-	2.1	2.1(74.)	3260.
4	715.	24.	739.	17.	23.	0.	-25.	-24.	-	1.1	1.2(75.)	5700.
5	809.	17.	825.	18.	18.	0.	-17.	-17.	-	1.5	1.5(76.)	4400.
6	845.	10.	855.	10.	15.	0.	-34.	-35.	-	0.8	0.8(77.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
149	NESESE 17 2S 2W	0	748	1.66	94.	3001.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	80.	220.	45.	40.	0.	-5.	-3.	-	4.4	5.0(65.)	1400.
2	228.	20.	248.	45.	40.	0.	6.	8.	-	4.0	4.5(67.)	1780.
3	280.	65.	350.	70.	50.	0.	17.	19.	-	8.8	9.7(67.)	850.
4	380.	67.	475.	45.	40.	0.	15.	17.	-	7.2	7.8(69.)	1010.
5	550.	42.	592.	50.	43.	0.	10.	12.	-	5.3	5.6(71.)	1350.

6	630.	18.	648.	33.	33.	0.	-9.	-7.	-	2.1	2.1(72.)	3280.
7	764.	108.	890.	50.	50.	0.	-12.	-10.	-	1.7	1.7(74.)	3920.
8	893.	35.	925.	50.	37.	0.	-3.	-1.	-	2.6	2.6(75.)	2590.
9	990.	48.	1038.	100.	50.	0.	7.	9.	-	4.0	3.9(77.)	1780.
10	1060.	35.	1103.	30.	30.	0.	-4.	-2.	-	2.6	2.6(77.)	2590.
11	1110.	10.	1120.	25.	15.	0.	-23.	-25.	-	1.1	1.1(78.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
150	NWNWNE 17 2S 2W	0	747	1.48	89.	2998.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	25.	205.	60.	50.	0.	8.	13.	-	FRESH	FRESH	FRESH
2	260.	10.	270.	50.	40.	0.	15.	23.	-	8.8	9.8(67.)	850.
3	438.	26.	464.	50.	25.	0.	5.	10.	-	4.0	4.3(69.)	1780.
4	530.	165.	760.	100.	55.	0.	-8.	-5.	-	2.1	2.2(70.)	3280.
5	770.	38.	808.	55.	30.	0.	3.	8.	-	3.2	3.3(74.)	2180.
6	890.	40.	930.	100.	32.	0.	15.	21.	-	7.2	7.2(75.)	1010.
7	980.	40.	1020.	36.	23.	0.	-11.	-5.	-	1.7	1.7(76.)	3920.
8	1000.	40.	1100.	12.	15.	0.	-30.	-25.	-	1.0	1.0(77.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
151	NENWNW 17 2S 2W	0	848	1.59	95.	3050.	1.30

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	145.	22.	130.	50.	27.	0.	15.	19.	-	7.7	8.7(65.)	960.
2	210.	35.	245.	30.	20.	0.	22.	25.	-	14.0	15.7(66.)	550.
3	300.	70.	480.	30.	16.	0.	20.	23.	-	11.8	13.0(67.)	605.
4	540.	110.	720.	90.	33.	0.	14.	17.	-	6.7	7.1(70.)	1090.
5	745.	35.	780.	90.	32.	0.	16.	19.	-	7.7	7.9(73.)	960.
6	715.	52.	900.	90.	25.	0.	25.	28.	-	27.0	27.8(75.)	292.
7	1029.	52.	1119.	12.	10.	0.	-16.	-13.	-	1.5	1.5(77.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
152	NESWNE 18 2S 2W	0	856	1.22	104.	2647.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	78.	190.	70.	50.	0.	7.	17.	-	18.7	21.3(65.)	330.
2	210.	72.	485.	40.	40.	0.	20.	30.	-	10.0	11.2(66.)	750.
3	520.	48.	600.	35.	35.	0.	13.	23.	-	5.5	5.8(71.)	1300.
4	653.	38.	740.	50.	50.	0.	20.	30.	-	10.0	10.3(72.)	750.
5	750.	190.	1140.	100.	55.	0.	12.	22.	-	5.3	5.4(74.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
153	SENENE 20 2S 2W	995	657	2.22	154.	4308.	0.96

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	90.	320.	45.	45.	0.	-6.	-10.	-	5.4	6.1(65.)	1130.
2	350.	55.	405.	50.	50.	0.	8.	4.	-	5.3	5.9(67.)	1350.

3	475.	17.	492.	25.	25.	0.	3.	-1.	-	4.0	4.4(68.)	1780.
4	520.	47.	645.	30.	30.	0.	10.	5.	-	5.5	6.0(69.)	1300.
5	690.	30.	720.	35.	35.	0.	7.	3.	-	4.9	5.2(70.)	1460.
6	755.	50.	820.	35.	40.	0.	-10.	-14.	-	2.1	2.2(71.)	3280.
7	830.	115.	968.	37.	37.	0.	-12.	-16.	-	2.1	2.1(71.)	3280.
8	990.	52.	1042.	35.	37.	0.	2.	-2.	-	4.0	4.1(73.)	1780.
9	1060.	20.	1100.	30.	30.	0.	7.	3.	-	4.9	5.0(74.)	1460.
10	1160.	30.	1190.	26.	26.	0.	1.	-3.	-	3.8	3.8(75.)	1860.
11	1270.	18.	1288.	11.	15.	0.	-37.	-41.	-	0.8	0.8(76.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
154	NENENESW 20 2S 2W	906	968	1.76	90.	2688.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	87.	225.	40.	40.	0.	8.	9.	-	FRESH	FRESH	FRESH
2	283.	40.	383.	35.	35.	0.	20.	21.	-	11.8	13.0(67.)	605.
3	513.	60.	685.	40.	35.	0.	22.	23.	-	13.0	14.8(71.)	550.
4	710.	115.	840.	50.	36.	0.	11.	12.	-	5.5	5.5(73.)	1300.
5	850.	67.	935.	50.	40.	0.	14.	15.	-	7.2	7.2(75.)	1010.
6	1025.	44.	1100.	40.	25.	0.	20.	21.	-	11.8	11.4(78.)	605.
7	1210.	15.	1225.	25.	25.	0.	7.	8.	-	4.6	4.3(80.)	1540.
8	1300.	10.	1310.	5.	10.	0.	-34.	-35.	-	0.8	0.8(82.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
155	SWNWSENW 20 2S 2W	0	968	1.78	0.	2756.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	78.	49.	127.	50.	50.	0.	6.	6.	-	18.7	21.4(65.)	330.
2	140.	65.	215.	90.	50.	0.	14.	14.	-	FRESH	FRESH	FRESH
3	240.	20.	260.	45.	40.	0.	20.	21.	-	13.0	14.5(67.)	585.
4	290.	40.	330.	55.	49.	0.	30.	30.	-	FRESH	FRESH	FRESH
5	433.	60.	686.	50.	50.	0.	18.	19.	-	10.0	10.8(69.)	750.
6	704.	112.	830.	90.	55.	0.	7.	7.	-	4.6	4.7(73.)	1540.
7	840.	52.	918.	90.	55.	0.	14.	14.	-	7.2	7.2(75.)	1010.
8	943.	40.	1032.	40.	38.	0.	10.	10.	-	5.3	5.2(76.)	1350.
9	1090.	24.	1114.	24.	27.	0.	6.	5.	-	4.0	3.9(78.)	1780.
10	1184.	19.	1203.	11.	16.	0.	-13.	-13.	-	1.7	1.5(79.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
156	SENW 21 2S 2W	916	476	0.78	200.	1849.	1.70

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	50.	250.	20.	20.	0.	3.	21.	-	2.5	2.8(67.)	2730.
2	290.	107.	405.	35.	22.	0.	22.	40.	-	7.2	7.8(68.)	1010.
3	540.	180.	770.	35.	25.	0.	20.	38.	-	5.5	5.7(73.)	1300.
4	780.	60.	840.	35.	25.	0.	30.	30.	-	4.0	3.9(77.)	1780.
5	890.	10.	900.	25.	25.	0.	34.	41.	-	7.7	7.4(79.)	960.
6	940.	50.	990.	16.	13.	0.	20.	38.	-	5.5	5.2(80.)	1300.
7	1028.	34.	1062.	8.	8.	0.	-7.	11.	-	1.5	1.4(81.)	4400.
8	1090.	28.	1118.	7.	7.	0.	-11.	7.	-	1.5	1.4(82.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
157	NWSWNW 21 2S 2W	0	669	1.14	110.	2233.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	47.	300.	35.	32.	0.	18.	29.	-	8.2	9.2(66.)	900.
2	337.	36.	383.	50.	45.	0.	40.	40.	-	FRESH	FRESH	FRESH
3	460.	85.	630.	40.	36.	0.	28.	28.	-	7.2	7.8(69.)	1010.
4	660.	25.	704.	45.	45.	0.	11.	23.	-	4.9	5.1(71.)	1460.
5	753.	25.	780.	50.	50.	0.	6.	20.	-	4.0	4.1(72.)	1780.
6	790.	90.	900.	50.	50.	0.	5.	15.	-	3.8	3.8(73.)	1860.
7	950.	30.	995.	45.	45.	0.	8.	19.	-	4.0	4.0(75.)	1780.
8	1010.	20.	1040.	35.	35.	0.	12.	24.	-	5.3	5.3(75.)	1350.
9	1060.	29.	1120.	25.	25.	0.	15.	25.	-	5.5	5.4(76.)	1300.
10	1136.	22.	1160.	16.	23.	0.	13.	24.	-	5.3	5.2(77.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
158	SESWSE 22 2S 2W	0	448	1.82	100.	2546.	1.43

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	30.	130.	100.	25.	0.	-2.	-2.	-	5.4	5.2(65.)	1130.
2	185.	100.	390.	50.	20.	0.	-5.	-5.	-	2.5	2.8(66.)	2730.
3	410.	20.	450.	50.	21.	0.	-7.	-7.	-	2.1	2.2(69.)	3280.
4	480.	55.	560.	70.	23.	0.	-9.	-9.	-	2.1	2.2(70.)	3280.
5	579.	80.	670.	70.	22.	0.	-11.	-11.	-	2.1	2.1(72.)	3280.
6	810.	35.	860.	13.	17.	0.	-23.	-23.	-	1.1	1.1(75.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
159	NWNENW 22 2S 2W	956	250	1.01	100.	2004.	1.62

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	35.	188.	50.	35.	0.	-6.	8.	-	2.8	3.2(65.)	2200.
2	230.	50.	318.	50.	30.	0.	-12.	2.	-	1.5	1.7(67.)	4400.
3	370.	20.	390.	50.	36.	0.	-18.	-6.	-	1.1	1.2(70.)	5700.
4	440.	110.	560.	120.	44.	0.	-20.	-5.	-	1.1	1.2(71.)	5700.
5	570.	63.	635.	50.	41.	0.	-15.	-1.	-	1.5	1.5(73.)	4400.
6	650.	40.	710.	50.	38.	0.	-16.	-2.	-	1.4	1.4(74.)	4850.
7	750.	30.	780.	20.	35.	0.	-31.	-17.	-	0.8	0.8(76.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
160	SWNENW 26 2S 2W	952	948	1.34	136.	3008.	1.08

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	107.	398.	30.	25.	0.	-7.	1.	-	2.1	2.3(66.)	3280.
2	400.	38.	438.	100.	35.	0.	-10.	-3.	-	1.7	1.9(68.)	3920.
3	450.	58.	508.	47.	22.	0.	-14.	-5.	-	1.5	1.6(68.)	4400.
4	623.	10.	630.	17.	17.	0.	-25.	-20.	-	1.0	1.1(70.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
161	NWSWNE 27 2S 2W	925	460	1.24	90.	1732.	1.82

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	18.	158.	100.	55.	0.	7.	17.	-	18.7	21.0(66.)	330.
2	220.	15.	235.	100.	55.	0.	10.	22.	-	5.5	5.1(68.)	1300.
3	308.	28.	348.	50.	50.	0.	20.	30.	-	10.0	10.8(69.)	750.
4	370.	53.	423.	70.	55.	0.	7.	15.	-	4.0	4.2(70.)	1780.
5	443.	50.	520.	60.	50.	0.	-8.	1.	-	2.1	2.1(72.)	3280.
6	550.	54.	614.	100.	55.	0.	-5.	4.	-	2.1	2.1(74.)	3280.
7	680.	113.	910.	55.	50.	0.	5.	14.	-	3.8	3.7(76.)	1860.
8	950.	17.	967.	25.	25.	0.	-6.	3.	-	2.1	1.9(81.)	3280.
9	1010.	16.	1026.	10.	12.	0.	-17.	-8.	-	1.5	1.4(82.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
162	SWNESW 28 2S 2W	1078	760	1.43	100.	2799.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	40.	170.	100.	50.	0.	3.	9.	-	8.8	10.0(65.)	700.
2	230.	60.	362.	40.	30.	0.	6.	12.	-	4.0	4.5(67.)	1780.
3	390.	25.	415.	50.	30.	0.	12.	18.	-	5.5	5.9(69.)	1300.
4	438.	34.	472.	17.	20.	0.	-1.	5.	-	2.6	2.8(70.)	2590.
5	525.	35.	580.	15.	15.	0.	-14.	-8.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
163	SWSWNE 28 2S 2W	953	1154	1.69	169.	6539.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	255.	12.	267.	45.	40.	0.	-7.	-5.	-	2.1	2.3(66.)	3280.
2	290.	38.	328.	90.	35.	0.	8.	10.	-	4.6	5.1(66.)	1540.
3	382.	20.	435.	40.	22.	0.	13.	15.	-	6.7	7.4(67.)	1090.
4	490.	30.	520.	50.	30.	0.	17.	19.	-	8.8	9.6(68.)	850.
5	610.	72.	700.	45.	25.	0.	29.	29.	-	FRESH	FRESH	FRESH
6	712.	50.	790.	45.	22.	0.	20.	22.	-	11.8	12.4(71.)	605.
7	850.	160.	1140.	110.	33.	0.	6.	7.	-	4.0	4.1(72.)	1780.
8	1150.	40.	1190.	70.	25.	0.	8.	10.	-	4.6	4.6(75.)	1540.
9	1230.	20.	1250.	25.	24.	0.	15.	17.	-	7.2	7.1(76.)	1010.
10	1340.	22.	1362.	13.	14.	0.	-5.	-3.	-	2.5	2.4(77.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
164	SWSESE 30 2S 2W	956	854	1.85	163.	5210.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	10.	210.	35.	35.	0.	5.	5.	-	18.7	21.1(66.)	330.
2	310.	40.	350.	30.	22.	0.	12.	11.	-	5.5	6.1(67.)	1300.
3	420.	145.	725.	70.	27.	0.	23.	22.	-	19.0	20.7(68.)	407.
4	810.	10.	820.	30.	20.	0.	6.	5.	-	4.6	4.7(73.)	1540.
5	865.	20.	894.	10.	10.	0.	-14.	-15.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
165	NWSWNE 31 2S 2W	0	553	1.69	37.	4000.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	15.	145.	30.	25.	0.	1.	3.	-	8.8	10.0(65.)	700.
2	340.	62.	440.	50.	27.	0.	12.	14.	-	3.5	6.1(67.)	1300.
3	452.	25.	490.	50.	26.	0.	22.	24.	-	17.0	18.4(69.)	458.
4	520.	33.	572.	50.	25.	0.	20.	22.	-	11.8	12.7(69.)	605.
5	715.	65.	780.	45.	25.	0.	7.	9.	-	4.6	4.8(72.)	1540.
6	847.	13.	860.	15.	30.	0.	-23.	-22.	-	1.1	1.2(73.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
166	SWSESE 31 2S 2W	987	954	1.87	102.	4048.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	25.	215.	40.	20.	0.	-8.	-9.	-	2.8	3.2(66.)	2200.
2	312.	30.	380.	30.	25.	0.	-5.	-6.	-	2.5	2.8(67.)	2730.
3	420.	125.	590.	50.	27.	0.	10.	9.	-	5.3	5.8(68.)	1350.
4	625.	45.	670.	50.	25.	0.	7.	6.	-	4.6	4.9(71.)	1540.
5	690.	20.	710.	26.	17.	0.	-6.	-7.	-	2.5	2.6(71.)	2730.
6	725.	25.	780.	20.	20.	0.	-15.	-16.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
167	NENWSW 31 2S 2W	998	753	1.37	94.	5305.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	40.	300.	25.	25.	0.	2.	9.	-	8.8	10.0(65.)	700.
2	320.	13.	333.	60.	40.	0.	1.	15.	-	6.5	7.1(67.)	1240.
3	400.	40.	440.	50.	23.	0.	12.	19.	-	3.5	5.0(68.)	1300.
4	485.	42.	550.	70.	40.	0.	15.	22.	-	7.2	7.8(69.)	1010.
5	630.	15.	645.	15.	19.	0.	5.	12.	-	4.0	4.2(70.)	1780.
6	720.	67.	830.	17.	17.	0.	-13.	-5.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
168	SENENW 31 2S 2W	981	854	1.89	72.	3340.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	37.	305.	40.	25.	0.	1.	-0.	-	8.8	10.0(65.)	700.
2	320.	20.	360.	40.	25.	0.	12.	11.	-	6.7	7.3(68.)	1090.
3	400.	76.	540.	50.	26.	0.	22.	21.	-	17.0	18.4(69.)	456.
4	700.	50.	750.	45.	25.	0.	11.	10.	-	5.5	5.5(73.)	1300.
5	823.	12.	832.	50.	50.	0.	-32.	-37.	-	0.8	0.8(74.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
169	NWSWNE 32 2S 2W	930	862	0.75	90.	2518.	0.89

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	45.	498.	40.	35.	0.	12.	30.	-	4.0	4.6(65.)	1780.
2	563.	20.	602.	35.	35.	0.	17.	37.	-	5.3	5.8(69.)	1350.
3	620.	125.	735.	70.	50.	0.	26.	26.	-	3.2	3.5(69.)	2180.
4	820.	29.	849.	35.	35.	0.	22.	41.	-	7.2	7.5(71.)	1010.
5	915.	40.	1000.	35.	35.	0.	15.	33.	-	4.0	4.2(72.)	1780.
6	1060.	20.	1080.	9.	10.	0.	-11.	7.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
170	NENWSW 32 2S 2W	933	752	1.66	222.	5508.	1.35

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	40.	410.	50.	22.	0.	3.	5.	-	3.8	4.1(69.)	1860.
2	450.	45.	530.	50.	25.	0.	12.	14.	-	5.5	5.9(70.)	1300.
3	540.	65.	665.	70.	22.	0.	10.	12.	-	5.3	5.6(71.)	1350.
4	690.	45.	780.	40.	16.	0.	7.	9.	-	4.6	4.7(73.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
171	SWSWNW 32 2S 2W	0	954	1.42	72.	5986.	0.94

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	188.	50.	315.	35.	25.	0.	2.	8.	-	3.2	3.6(65.)	2180.
2	390.	25.	415.	23.	15.	0.	10.	16.	-	4.9	5.4(67.)	1460.
3	472.	30.	545.	40.	17.	0.	17.	23.	-	8.2	9.0(68.)	900.
4	575.	55.	630.	50.	18.	0.	20.	25.	-	10.8	11.7(69.)	680.
5	680.	25.	705.	45.	16.	0.	17.	24.	-	8.2	8.7(70.)	900.
6	780.	20.	800.	30.	14.	0.	-1.	5.	-	2.6	2.8(71.)	2590.
7	860.	22.	910.	15.	15.	0.	-17.	-11.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
172	NWSESW 33 2S 2W	902	761	1.57	223.	4420.	0.85

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	130.	410.	50.	23.	0.	6.	10.	-	4.0	4.5(65.)	1780.
2	505.	45.	560.	16.	15.	0.	-5.	-1.	-	2.5	2.7(68.)	2730.
3	645.	35.	685.	35.	20.	0.	10.	14.	-	5.3	5.7(69.)	1350.
4	760.	107.	890.	110.	37.	0.	17.	21.	-	8.2	8.7(70.)	900.
5	900.	132.	1092.	100.	36.	0.	15.	19.	-	7.2	7.6(71.)	1010.
6	1205.	20.	1225.	17.	17.	0.	-8.	-4.	-	2.1	2.1(74.)	3260.
7	1285.	21.	1306.	10.	17.	0.	-15.	-11.	-	1.5	1.5(74.)	4400.
8	1360.	12.	1372.	17.	35.	0.	-50.	-50.	-	0.4	0.4(75.)	18000.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
173	SWNWSW 34 2S 2W	874	463	1.41	100.	2502.	1.46

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	50.	150.	60.	60.	0.	12.	18.	-	FRESH	FRESH	FRESH

2	205.	40.	280.	60.	50.	0.	16.	23.	-	7.7	8.6(66.)	960.
3	310.	70.	415.	25.	40.	0.	21.	27.	-	11.8	12.9(68.)	605.
4	450.	37.	487.	25.	30.	0.	27.	27.	-	11.8	12.6(70.)	605.
5	540.	35.	600.	21.	26.	0.	23.	29.	-	14.0	14.6(71.)	550.
6	675.	25.	715.	20.	25.	0.	15.	21.	-	7.2	7.3(73.)	1010.
7	735.	62.	890.	25.	30.	0.	27.	27.	-	10.8	10.9(74.)	600.
8	905.	85.	1040.	35.	41.	0.	30.	30.	-	17.0	16.7(77.)	458.
9	1080.	25.	1105.	35.	40.	0.	15.	22.	-	6.7	5.4(79.)	1090.
10	1150.	60.	1260.	35.	46.	0.	23.	23.	-	14.0	13.2(80.)	550.
11	1320.	25.	1345.	25.	30.	0.	27.	27.	-	10.8	9.9(83.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
174	SWNWSE 1 2S 3W	1013	1066	1.42	304.	7185.	0.79

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	40.	390.	45.	25.	0.	2.	8.	-	8.8	9.9(66.)	700.
2	405.	23.	493.	45.	25.	0.	7.	14.	-	4.0	4.5(67.)	1780.
3	570.	25.	595.	30.	19.	0.	10.	16.	-	4.9	5.4(66.)	1460.
4	600.	16.	616.	27.	15.	0.	15.	22.	-	7.7	8.4(68.)	960.
5	657.	35.	790.	35.	15.	0.	11.	17.	-	5.3	5.7(69.)	1350.
6	805.	55.	860.	50.	35.	0.	9.	15.	-	4.9	5.2(70.)	1460.
7	870.	127.	1040.	45.	25.	0.	-3.	3.	-	2.6	2.8(70.)	2590.
8	1100.	19.	1119.	35.	18.	0.	10.	17.	-	5.3	5.5(72.)	1350.
9	1210.	20.	1230.	30.	23.	0.	6.	15.	-	4.6	4.7(73.)	1540.
10	1280.	24.	1304.	20.	13.	0.	-7.	-1.	-	2.1	2.1(74.)	3280.
11	1320.	20.	1340.	35.	35.	0.	-20.	-14.	-	1.4	1.4(74.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
175	SWSWNW 2 2S 3W	1029	750	1.19	162.	3799.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	90.	350.	45.	30.	0.	11.	21.	-	FRESH	FRESH	FRESH
2	380.	50.	440.	32.	22.	0.	6.	17.	-	4.0	4.4(68.)	1780.
3	507.	60.	590.	45.	27.	0.	20.	30.	-	10.0	10.7(70.)	750.
4	800.	45.	862.	45.	28.	0.	21.	32.	-	10.8	11.0(74.)	680.
5	893.	40.	950.	50.	28.	0.	25.	25.	-	5.5	5.5(75.)	1300.
6	1060.	18.	1078.	35.	22.	0.	20.	32.	-	10.8	10.6(77.)	680.
7	1140.	18.	1158.	35.	22.	0.	-7.	3.	-	2.1	2.0(78.)	3280.
8	1225.	60.	1320.	17.	17.	0.	-10.	0.	-	1.7	1.6(79.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
176	NWNESE 3 2S 3W	1017	670	1.79	0.	2250.	1.62

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	65.	40.	120.	70.	70.	0.	-10.	-10.	30.3	2.8	3.2(65.)	2200.
2	160.	50.	240.	50.	50.	0.	3.	3.	27.3	16.3	18.3(66.)	375.
3	250.	20.	278.	50.	50.	0.	8.	8.	30.3	8.9	9.4(68.)	1460.
4	310.	25.	370.	25.	27.	0.	10.	10.	30.3	5.3	5.8(69.)	1350.
5	409.	21.	430.	15.	15.	0.	6.	5.	-	4.0	4.3(70.)	1780.
6	500.	35.	580.	50.	50.	0.	3.	3.	30.3	3.8	3.9(72.)	1860.
7	610.	47.	680.	50.	50.	0.	17.	17.	24.2	8.8	9.0(73.)	850.

8	775.	65.	860.	50.	50.	0.	15.	15.	29.1	7.7	7.6(76.)	960.
9	1035.	67.	1118.	25.	30.	0.	-10.	-10.	24.2	2.1	1.9(80.)	3240.
10	1141.	40.	1181.	25.	30.	0.	-15.	-15.	24.2	1.5	1.4(82.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
177	NENWSW 3 2S 3W	0	852	1.47	103.	1601.	1.53

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	60.	180.	50.	50.	0.	17.	22.	-	8.2	9.3(65.)	900.
2	200.	42.	268.	45.	45.	0.	6.	11.	-	4.0	4.5(67.)	1780.
3	280.	13.	293.	45.	40.	0.	15.	23.	-	8.2	9.0(68.)	900.
4	300.	20.	345.	35.	35.	0.	7.	13.	-	4.0	4.4(68.)	1780.
5	355.	50.	470.	26.	30.	0.	-9.	-4.	-	2.1	2.2(69.)	3280.
6	550.	57.	690.	50.	50.	0.	11.	16.	-	5.3	5.5(72.)	1350.
7	750.	62.	890.	50.	50.	0.	5.	10.	-	4.0	4.0(75.)	1780.
8	900.	50.	1030.	50.	36.	0.	15.	20.	-	7.2	7.0(77.)	1010.
9	1178.	22.	1100.	45.	32.	0.	6.	12.	-	4.0	3.7(82.)	1780.
10	1170.	18.	1188.	12.	17.	0.	-30.	-25.	-	0.8	0.8(81.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
178	NESWNE 3 2S 3W	1048	1154	1.70	273.	3319.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	80.	428.	35.	20.	0.	15.	17.	-	7.7	8.5(67.)	960.
2	530.	53.	688.	35.	30.	0.	17.	19.	-	8.2	8.6(71.)	900.
3	700.	68.	790.	40.	25.	0.	19.	21.	-	10.8	11.0(73.)	680.
4	845.	42.	665.	50.	30.	0.	23.	25.	-	17.0	15.9(75.)	458.
5	902.	30.	957.	20.	32.	0.	10.	12.	-	5.3	5.2(76.)	1350.
6	1004.	19.	1023.	20.	17.	0.	3.	5.	-	3.8	3.6(78.)	1860.
7	1130.	26.	1190.	15.	20.	0.	-10.	-8.	-	2.1	1.9(79.)	3280.
8	1210.	35.	1245.	15.	22.	0.	-15.	-13.	-	1.5	1.4(80.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
179	SESENW 4 2S 3W	1024	654	1.91	353.	4682.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	410.	63.	480.	8.	10.	0.	-30.	-31.	-	1.0	1.1(68.)	6200.
2	503.	50.	588.	10.	11.	0.	-14.	-15.	-	1.5	1.5(69.)	4400.
3	648.	52.	710.	50.	27.	0.	15.	14.	-	7.7	8.1(71.)	960.
4	740.	30.	770.	45.	26.	0.	7.	5.	-	4.6	4.8(72.)	1540.
5	798.	32.	830.	35.	25.	0.	10.	9.	-	5.3	5.5(72.)	1350.
6	835.	42.	882.	30.	15.	0.	5.	4.	-	4.0	4.1(73.)	1780.
7	930.	72.	1050.	50.	35.	0.	6.	5.	-	4.0	4.1(74.)	1780.
8	1062.	26.	1088.	30.	22.	0.	1.	-0.	-	3.2	3.2(75.)	2186.
9	1112.	28.	1140.	15.	15.	0.	-12.	-13.	-	1.7	1.7(76.)	3920.
10	1148.	18.	1166.	14.	14.	0.	-25.	-25.	-	1.1	1.1(76.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
180	SENWSE 4 2S 3W	1029	351	1.07	371.	4543.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	400.	75.	580.	15.	15.	0.	-8.	5.	-	1.7	1.9(68.)	3920.
2	595.	47.	677.	30.	30.	0.	22.	35.	-	10.8	11.4(71.)	680.
3	704.	47.	810.	40.	25.	0.	17.	30.	-	7.2	7.5(72.)	1010.
4	820.	45.	945.	40.	26.	0.	20.	33.	-	9.8	9.0(73.)	850.
5	973.	35.	1028.	45.	30.	0.	22.	35.	-	10.8	10.8(75.)	680.
6	1045.	20.	1093.	16.	20.	0.	6.	19.	-	3.6	3.7(76.)	1860.
7	1199.	28.	1231.	7.	13.	0.	-30.	-17.	-	0.8	0.8(78.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
181	NENESW 5 2S 3W	1014	655	1.82	370.	6681.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	410.	110.	560.	7.	7.	0.	-27.	-27.	-	1.0	1.1(68.)	6500.
2	570.	65.	730.	10.	12.	0.	-13.	-13.	-	4.7	4.8(70.)	3920.
3	850.	50.	950.	25.	20.	0.	14.	14.	-	7.2	7.3(73.)	1010.
4	990.	35.	1025.	40.	20.	0.	20.	20.	-	11.8	11.8(75.)	605.
5	1075.	35.	1120.	40.	20.	0.	15.	15.	-	7.7	7.6(76.)	960.
6	1160.	50.	1210.	15.	15.	0.	-5.	-5.	-	2.5	2.4(77.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
182	SESENE 5 2S 3W	0	853	2.14	368.	6321.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	368.	40.	410.	10.	10.	0.	-15.	-19.	-	1.6	1.8(68.)	3750.
2	480.	32.	512.	5.	5.	0.	-30.	-34.	-	1.0	1.1(70.)	6200.
3	535.	45.	580.	8.	7.	0.	-20.	-24.	-	1.5	1.6(70.)	4400.
4	615.	85.	728.	20.	17.	0.	-12.	-15.	-	2.1	2.1(71.)	3280.
5	800.	30.	830.	30.	31.	0.	7.	5.	-	4.9	5.0(74.)	1460.
6	860.	52.	927.	30.	20.	0.	15.	11.	-	8.2	8.3(74.)	900.
7	1000.	25.	1025.	30.	21.	0.	9.	5.	-	5.3	5.2(76.)	1350.
8	1070.	28.	1098.	40.	22.	0.	19.	15.	-	11.8	11.5(77.)	605.
9	1141.	30.	1170.	20.	15.	0.	-8.	-12.	-	2.5	2.4(78.)	2730.
10	1240.	39.	1283.	7.	10.	0.	-29.	-33.	-	1.0	1.0(79.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
183	NENWSE 5 2S 3W	1055	254	1.51	377.	6497.	1.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	480.	75.	655.	7.	10.	0.	-30.	-25.	-	1.0	1.1(69.)	6500.
2	730.	20.	750.	20.	15.	0.	20.	25.	-	10.8	11.3(71.)	680.
3	793.	11.	808.	15.	15.	0.	13.	19.	-	6.7	6.9(72.)	1090.
4	883.	83.	1050.	50.	25.	0.	17.	22.	-	8.2	8.4(73.)	900.
5	1090.	45.	1135.	50.	24.	0.	22.	27.	-	14.0	13.9(75.)	550.
6	1165.	25.	1190.	20.	20.	0.	15.	20.	-	7.2	7.1(76.)	1010.
7	1250.	30.	1286.	11.	10.	0.	-12.	-7.	-	1.7	1.7(77.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
184	SESENW 5 2S 3W	1016	654	1.83	334.	6548.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	453.	45.	498.	6.	9.	0.	-40.	-41.	-	0.7	0.7(69.)	9400.
2	515.	45.	640.	7.	10.	0.	-30.	-31.	-	1.0	1.1(69.)	6500.
3	680.	22.	702.	12.	10.	0.	-6.	-5.	-	2.5	2.6(71.)	2730.
4	825.	40.	900.	30.	22.	0.	12.	12.	-	5.5	5.7(73.)	1300.
5	930.	20.	950.	35.	17.	0.	20.	20.	-	13.0	13.2(74.)	585.
6	990.	37.	1027.	40.	20.	0.	16.	15.	-	8.2	8.3(74.)	900.
7	1060.	50.	1127.	45.	20.	0.	20.	20.	-	11.8	11.9(75.)	605.
8	1152.	48.	1200.	25.	15.	0.	3.	3.	-	3.8	3.7(76.)	1860.
9	1250.	44.	1300.	4.	8.	0.	-36.	-37.	-	0.7	0.7(77.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
185	NWNWNENW 5 2S 3W	1031	668	1.71	100.	2378.	1.87

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	50.	150.	70.	42.	0.	5.	6.	-	18.7	21.2(65.)	330.
2	175.	40.	215.	45.	32.	0.	10.	11.	-	FRESH	FRESH	FRESH
3	280.	150.	435.	14.	15.	0.	-5.	-4.	-	4.4	4.8(69.)	1400.
4	465.	73.	570.	5.	10.	0.	-30.	-29.	-	1.0	1.0(72.)	6500.
5	718.	48.	860.	17.	17.	0.	1.	2.	-	3.2	3.1(77.)	2180.
6	882.	75.	983.	30.	25.	0.	12.	13.	-	5.5	5.2(80.)	1300.
7	1028.	40.	1065.	32.	24.	0.	10.	11.	-	5.3	4.8(83.)	1350.
8	1070.	42.	1115.	34.	25.	0.	15.	17.	-	7.2	6.5(84.)	1010.
9	1123.	20.	1143.	30.	24.	0.	12.	14.	-	5.5	4.9(85.)	1300.
10	1180.	14.	1194.	15.	15.	0.	-13.	-12.	-	1.7	1.5(86.)	3920.
11	1272.	16.	1288.	6.	10.	0.	-25.	-24.	-	1.1	1.0(87.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
186	SWSWSE 6 2S 3W	0	1048	1.46	396.	6737.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	420.	35.	503.	17.	14.	0.	-15.	-10.	-	1.6	1.8(68.)	3750.
2	520.	40.	620.	10.	13.	0.	-22.	-17.	-	1.1	1.2(69.)	5700.
3	640.	43.	750.	11.	12.	0.	-29.	-24.	-	1.0	1.1(70.)	6500.
4	785.	32.	920.	20.	15.	0.	-10.	-5.	-	2.1	2.1(72.)	3280.
5	960.	35.	995.	35.	20.	0.	4.	10.	-	5.8	5.8(74.)	1860.
6	1050.	38.	1088.	25.	20.	0.	-10.	-5.	-	2.1	2.1(75.)	3280.
7	1098.	25.	1130.	15.	15.	0.	-32.	-27.	-	0.8	0.8(75.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
187	NESWSW 6 2S 3W	0	852	1.20	160.	4669.	1.36

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	110.	334.	50.	35.	0.	-10.	0.	-	1.9	2.2(66.)	3200.
2	390.	20.	410.	38.	35.	0.	20.	31.	-	10.8	11.7(69.)	680.
3	470.	105.	666.	15.	15.	0.	-20.	-10.	-	1.4	1.4(70.)	4850.
4	704.	26.	730.	8.	14.	0.	-35.	-25.	-	0.7	0.7(73.)	9400.

5	760.	40.	865.	10.	15.	0.	-16.	-6.	-	1.5	1.5(74.)	4400.
6	925.	8.	933.	15.	15.	0.	-11.	-1.	-	1.7	1.7(72.)	3920.
7	1025.	30.	1055.	40.	30.	0.	7.	17.	-	4.0	3.9(77.)	1780.
8	1080.	60.	1140.	13.	15.	0.	-23.	-13.	-	1.1	1.1(78.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
188	NWNENE 6 2S 3W	0	455	1.50	405.	6791.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	410.	105.	520.	15.	15.	0.	-13.	-8.	-	1.6	1.8(68.)	3750.
2	556.	60.	650.	5.	11.	0.	-40.	-35.	-	0.7	0.7(69.)	9400.
3	678.	70.	930.	10.	15.	0.	-7.	-2.	-	2.1	2.2(71.)	3280.
4	950.	22.	972.	14.	18.	0.	5.	10.	-	4.0	4.1(74.)	1760.
5	1025.	27.	1053.	20.	25.	0.	10.	15.	-	4.9	4.9(74.)	1460.
6	1083.	100.	1210.	40.	22.	0.	8.	13.	-	4.6	4.6(75.)	1540.
7	1240.	31.	1290.	7.	11.	0.	-30.	-25.	-	1.0	1.0(77.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
189	NWNENW 6 2S 3W	1002	656	1.89	92.	4996.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	115.	60.	418.	25.	20.	0.	1.	-0.	-	8.8	10.1(65.)	700.
2	460.	67.	557.	80.	50.	0.	18.	17.	-	10.0	10.9(68.)	750.
3	595.	45.	730.	35.	20.	0.	-10.	-11.	-	2.1	2.2(70.)	3260.
4	760.	36.	796.	15.	15.	0.	-20.	-21.	-	1.4	1.4(71.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
190	SESESE 7 2S 3W	1054	354	0.98	100.	7398.	0.90

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	70.	170.	90.	50.	0.	-8.	6.	-	1.9	2.2(64.)	3200.
2	265.	15.	280.	30.	30.	0.	10.	25.	-	FRESH	FRESH	FRESH
3	300.	68.	398.	16.	13.	0.	-10.	4.	-	1.6	1.8(66.)	3750.
4	430.	83.	585.	12.	10.	0.	-17.	-3.	-	1.4	1.5(67.)	4850.
5	662.	40.	765.	20.	12.	0.	-11.	3.	-	1.5	1.6(69.)	4400.
6	850.	27.	877.	40.	25.	0.	2.	16.	-	2.6	2.8(71.)	2590.
7	900.	45.	945.	30.	15.	0.	17.	31.	-	5.7	7.0(72.)	1090.
8	960.	67.	1027.	27.	15.	0.	-20.	-6.	-	1.1	1.2(72.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
191	NENWNW 7 2S 3W	0	454	1.70	104.	5735.	1.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	104.	56.	160.	100.	45.	0.	-5.	-3.	-	4.4	5.0(65.)	1400.
2	190.	33.	223.	70.	35.	0.	-10.	-8.	-	2.8	3.2(66.)	2200.
3	240.	40.	280.	45.	20.	0.	4.	6.	-	18.7	21.0(66.)	330.
4	330.	22.	392.	30.	17.	0.	8.	10.	-	FRESH	FRESH	FRESH
5	430.	60.	497.	22.	15.	0.	-6.	-4.	-	2.5	2.7(68.)	2730.

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WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
192	SENENE 8 2S 3W	1055	555	1.39	332.	5502.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	332.	100.	540.	8.	8.	0.	-20.	-13.	-	1.4	1.5(67.)	4850.
2	595.	27.	654.	10.	10.	0.	-32.	-25.	-	0.8	0.9(70.)	7800.
3	798.	20.	900.	17.	16.	0.	-7.	-0.	-	2.1	2.1(72.)	3280.
4	940.	40.	980.	40.	20.	0.	7.	14.	-	4.0	4.0(74.)	1780.
5	990.	40.	1056.	30.	18.	0.	9.	15.	-	4.6	4.5(75.)	1540.
6	1100.	22.	1122.	27.	16.	0.	2.	9.	-	3.2	3.2(76.)	2180.
7	1185.	40.	1235.	16.	15.	0.	-12.	-5.	-	1.7	1.7(77.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
193	SWSWSW 8 2S 3W	1045	755	1.73	141.	7718.	1.00

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	202.	32.	260.	35.	18.	0.	6.	7.	-	4.0	4.5(66.)	1780.
2	357.	23.	380.	15.	12.	0.	-4.	-3.	-	2.6	2.9(67.)	2590.
3	445.	58.	580.	10.	10.	0.	-15.	-14.	-	1.5	1.6(68.)	4400.
4	650.	30.	700.	18.	15.	0.	1.	2.	-	3.2	3.4(70.)	2180.
5	740.	15.	755.	16.	15.	0.	-6.	-5.	-	2.5	2.6(71.)	2730.
6	840.	50.	911.	35.	20.	0.	7.	8.	-	4.6	4.8(72.)	1540.
7	937.	74.	1011.	30.	18.	0.	3.	4.	-	3.8	3.8(73.)	1860.
8	1040.	50.	1090.	9.	10.	0.	-30.	-29.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
194	NESWSE 8 2S 3W	1000	454	1.50	106.	5786.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	105.	63.	267.	23.	22.	0.	3.	8.	-	16.3	18.7(65.)	375.
2	280.	44.	332.	30.	20.	0.	8.	13.	-	4.6	5.1(66.)	1540.
3	388.	12.	400.	15.	12.	0.	-8.	-4.	-	2.1	2.3(67.)	3280.
4	455.	23.	555.	10.	7.	0.	-11.	-5.	-	1.7	1.9(68.)	3920.
5	650.	40.	705.	15.	15.	0.	3.	8.	-	3.2	3.4(70.)	2180.
6	780.	15.	795.	15.	15.	0.	13.	18.	-	6.7	7.0(71.)	1090.
7	840.	40.	880.	50.	22.	0.	22.	27.	-	14.0	14.5(72.)	550.
8	940.	21.	261.	35.	17.	0.	15.	20.	-	7.2	7.4(73.)	1010.
9	995.	65.	1060.	50.	20.	0.	22.	27.	-	13.0	13.2(74.)	585.
10	1080.	40.	1125.	15.	13.	0.	-10.	-5.	-	2.1	2.1(74.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
195	SWNWSJ 8 2S 3J	0	955	1.95	140.	7376.	0.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	45.	270.	40.	25.	0.	7.	5.	-	FRESH	FRESH	FRESH
2	312.	40.	352.	15.	12.	0.	-1.	-3.	-	3.2	3.6(66.)	2180.

3	380.	17.	397.	8.	8.	0.	-4.	-5.	-	2.6	2.9(67.)	2590.
4	435.	60.	570.	8.	8.	0.	-20.	-22.	-	1.4	1.5(68.)	4850.
5	653.	47.	725.	15.	15.	0.	-16.	-12.	-	2.1	2.2(70.)	3280.
6	860.	24.	884.	20.	20.	0.	11.	9.	-	5.5	5.7(71.)	1300.
7	910.	40.	950.	35.	16.	0.	8.	5.	-	4.9	5.1(72.)	1460.
8	975.	60.	1035.	40.	17.	0.	7.	5.	-	4.6	4.7(73.)	1540.
9	1060.	32.	1110.	10.	10.	0.	-28.	-30.	-	1.0	1.0(73.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
196	SESESW 9 2S 3W	0	954	1.80	369.	5513.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	63.	500.	8.	8.	0.	-22.	-22.	-	1.4	1.5(68.)	4600.
2	550.	42.	600.	9.	10.	0.	-25.	-25.	-	1.1	1.2(70.)	5700.
3	642.	20.	662.	10.	15.	0.	2.	2.	-	5.2	5.4(71.)	2180.
4	700.	20.	720.	15.	15.	0.	11.	11.	-	5.5	5.7(71.)	1300.
5	780.	30.	813.	20.	20.	0.	15.	15.	-	7.7	8.0(72.)	960.
6	850.	50.	900.	35.	20.	0.	20.	20.	-	11.8	12.1(73.)	605.
7	930.	42.	972.	50.	21.	0.	25.	25.	-	27.0	27.5(74.)	292.
8	980.	20.	1010.	20.	21.	0.	18.	19.	-	10.0	10.0(75.)	750.
9	1040.	40.	1108.	30.	16.	0.	15.	15.	-	7.7	7.7(75.)	960.
10	1210.	22.	1232.	7.	10.	0.	-25.	-25.	-	1.1	1.1(77.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
197	SESENE 9 2S 3W	1037	1051	1.46	291.	6614.	1.34

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	320.	45.	370.	15.	11.	0.	-11.	-5.	-	1.7	1.9(68.)	3920.
2	410.	30.	440.	10.	8.	0.	-17.	-12.	-	1.5	1.6(69.)	4400.
3	452.	20.	472.	6.	6.	0.	-29.	-24.	-	1.0	1.1(70.)	6500.
4	540.	30.	570.	10.	10.	0.	-20.	-15.	-	1.4	1.4(71.)	4850.
5	660.	20.	680.	15.	15.	0.	5.	11.	-	4.0	4.1(72.)	1780.
6	730.	40.	770.	35.	18.	0.	8.	14.	-	4.6	4.7(73.)	1540.
7	785.	40.	825.	25.	18.	0.	10.	16.	-	4.9	5.0(74.)	1460.
8	860.	20.	880.	17.	17.	0.	12.	18.	-	5.5	5.5(75.)	1300.
9	930.	112.	1110.	40.	17.	0.	14.	19.	-	6.7	6.6(76.)	1090.
10	1140.	40.	1180.	13.	13.	0.	-15.	-10.	-	1.5	1.4(79.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
198	NESWSE 9 2S 3W	0	755	1.80	153.	5342.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	195.	90.	300.	15.	12.	0.	-10.	-10.	-	2.1	2.3(66.)	3280.
2	313.	120.	492.	8.	8.	0.	-17.	-17.	-	1.5	1.7(67.)	4400.
3	570.	165.	900.	40.	22.	0.	20.	20.	-	11.8	12.5(70.)	605.
4	920.	60.	1080.	35.	20.	0.	18.	18.	-	10.0	10.2(74.)	750.
5	1095.	57.	1170.	14.	14.	0.	-6.	-6.	-	2.5	2.5(75.)	2730.
6	1185.	19.	1204.	10.	11.	0.	-15.	-13.	-	1.5	1.5(76.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
199	NWSWSW 10 2S 3W	977	453	1.36	314.	5130.	1.28

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	350.	50.	400.	8.	5.	0.	-15.	-8.	-	1.6	1.8(68.)	3750.
2	555.	55.	610.	15.	10.	0.	7.	14.	-	4.0	4.2(71.)	1780.
3	660.	120.	810.	35.	14.	0.	23.	30.	-	14.0	14.5(72.)	550.
4	840.	80.	960.	35.	15.	0.	25.	32.	-	19.0	19.2(74.)	407.
5	1000.	20.	1050.	20.	11.	0.	20.	27.	-	10.8	10.5(76.)	680.
6	1145.	38.	1170.	8.	8.	0.	-26.	-19.	-	1.0	1.0(78.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
200	SENESE 10 2S 3W	956	152	1.29	168.	4331.	1.63

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	201.	20.	221.	16.	22.	0.	1.	10.	-	3.2	3.6(67.)	2180.
2	260.	22.	282.	21.	31.	0.	8.	17.	-	4.0	4.4(68.)	1780.
3	440.	75.	600.	50.	26.	0.	25.	34.	-	19.0	20.1(71.)	407.
4	675.	60.	805.	45.	32.	0.	32.	32.	-	14.0	14.1(74.)	550.
5	850.	23.	873.	45.	28.	0.	25.	25.	-	7.7	7.5(77.)	960.
6	1020.	60.	1178.	35.	20.	0.	5.	14.	-	3.8	3.5(80.)	1860.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
201	NWSWNW 10 2S 3W	1063	1151	1.23	370.	7473.	0.78

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	410.	70.	480.	11.	10.	0.	-10.	-0.	-	1.7	1.9(67.)	3920.
2	580.	20.	608.	13.	10.	0.	-4.	6.	-	2.5	2.7(68.)	2730.
3	750.	160.	1090.	30.	20.	0.	22.	32.	-	11.8	12.7(69.)	605.
4	1132.	20.	1190.	15.	11.	0.	-6.	4.	-	2.1	2.1(72.)	3280.
5	1230.	28.	1258.	15.	15.	0.	-17.	-7.	-	1.5	1.5(73.)	4400.
6	1310.	45.	1376.	15.	11.	0.	-10.	-0.	-	1.7	1.7(74.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
202	SWNENE 10 2S 3W	993	350	1.47	215.	4472.	1.62

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	270.	40.	340.	30.	25.	0.	7.	12.	-	4.0	4.4(68.)	1780.
2	422.	60.	572.	20.	20.	0.	5.	10.	-	4.0	4.2(70.)	1780.
3	640.	65.	815.	40.	26.	0.	16.	21.	-	7.7	7.8(74.)	960.
4	855.	30.	885.	35.	35.	0.	12.	17.	-	5.5	5.3(77.)	1300.
5	910.	65.	975.	50.	50.	0.	16.	21.	-	7.7	7.4(78.)	960.
6	1050.	35.	1110.	22.	22.	0.	-8.	-3.	-	2.1	1.9(81.)	3280.
7	1150.	18.	1166.	13.	20.	0.	-17.	-12.	-	1.5	1.4(82.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
203	SESENE 10 2S 3W	959	769	1.98	100.	2166.	1.73

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	30.	130.	60.	60.	0.	-3.	-5.	-	5.4	6.1(65.)	1130.
2	150.	28.	290.	40.	40.	0.	-2.	-0.	-	3.8	4.2(66.)	1860.
3	325.	80.	530.	50.	50.	0.	-2.	-4.	-	2.6	2.9(69.)	2590.
4	600.	50.	676.	50.	50.	0.	-2.	-0.	-	3.8	3.8(74.)	1860.
5	684.	55.	764.	45.	45.	0.	7.	5.	-	4.6	4.6(75.)	1540.
6	805.	68.	938.	37.	37.	0.	-5.	-7.	-	2.6	2.6(77.)	2590.
7	1009.	19.	1027.	24.	30.	0.	-14.	-16.	-	1.7	1.6(81.)	3920.
8	1110.	20.	1150.	17.	25.	0.	-26.	-28.	-	1.1	1.1(83.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
204	SWNESE 11 2S 3W	1031	1054	1.44	95.	4954.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	133.	253.	100.	50.	0.	20.	26.	-	10.8	12.3(65.)	680.
2	290.	50.	340.	50.	25.	0.	15.	21.	-	7.2	8.0(67.)	1010.
3	520.	95.	820.	50.	22.	0.	20.	25.	-	10.8	11.6(69.)	680.
4	850.	40.	915.	100.	32.	0.	23.	30.	-	17.0	17.4(73.)	456.
5	925.	70.	1000.	75.	32.	0.	30.	30.	-	19.0	19.2(74.)	407.
6	1060.	27.	1150.	25.	21.	0.	22.	28.	-	13.0	12.9(76.)	585.
7	1175.	70.	1288.	40.	23.	0.	15.	21.	-	7.2	7.0(77.)	1010.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
205	SWNENW 11 2S 3W	1014	849	0.71	103.	3556.	1.44

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	90.	230.	100.	37.	0.	10.	23.	-	8.8	10.0(66.)	700.
2	260.	33.	300.	70.	31.	0.	21.	41.	-	5.7	7.4(67.)	1090.
3	325.	50.	440.	45.	22.	0.	25.	44.	-	8.2	8.9(68.)	900.
4	530.	13.	583.	25.	27.	0.	14.	35.	-	9.6	9.8(71.)	1540.
5	680.	30.	720.	30.	20.	0.	21.	40.	-	5.5	5.5(73.)	1300.
6	750.	20.	770.	35.	25.	0.	23.	25.	-	2.6	2.7(74.)	2590.
7	790.	65.	855.	75.	30.	0.	30.	30.	-	3.2	3.2(75.)	2180.
8	880.	27.	907.	35.	20.	0.	26.	27.	-	2.6	2.6(76.)	2590.
9	915.	60.	1065.	45.	26.	0.	22.	41.	-	5.5	5.4(77.)	1300.
10	1125.	90.	1240.	35.	18.	0.	13.	32.	-	3.8	3.5(80.)	1860.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
206	NESWSW 11 2S 3W	955	652	1.70	164.	6627.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	38.	300.	26.	16.	0.	10.	12.	-	5.3	5.9(66.)	1350.
2	430.	45.	520.	50.	20.	0.	14.	16.	-	7.2	7.8(68.)	1010.
3	585.	57.	686.	50.	17.	0.	15.	17.	-	7.2	7.7(70.)	1010.
4	710.	40.	750.	50.	18.	0.	22.	24.	-	14.0	14.6(71.)	550.
5	770.	35.	860.	50.	20.	0.	20.	22.	-	11.8	12.2(72.)	605.
6	882.	20.	930.	32.	12.	0.	10.	12.	-	5.3	5.4(73.)	1350.
7	1055.	40.	1140.	33.	15.	0.	7.	9.	-	4.6	4.5(75.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
207	SESESE 13 2S 3W	921	1154	1.41	96.	6226.	0.81

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	53.	190.	90.	50.	0.	13.	19.	-	FRESH	FRESH	FRESH
2	230.	20.	250.	50.	50.	0.	15.	22.	-	7.7	8.7(65.)	960.
3	407.	26.	462.	25.	20.	0.	17.	25.	-	6.2	9.1(67.)	900.
4	503.	42.	560.	30.	18.	0.	13.	20.	-	5.5	5.0(68.)	1300.
5	570.	43.	613.	50.	26.	0.	27.	27.	-	11.8	12.9(68.)	605.
6	660.	35.	755.	45.	32.	0.	20.	27.	-	10.8	11.7(69.)	680.
7	750.	117.	1020.	50.	27.	0.	26.	26.	-	10.0	10.7(70.)	750.
8	1040.	26.	1066.	45.	20.	0.	18.	25.	-	8.8	9.1(72.)	850.
9	1128.	62.	1240.	50.	25.	0.	16.	22.	-	7.7	7.9(73.)	960.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
208	SESENW 14 2S 3W	943	452	1.13	331.	4995.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	375.	12.	405.	45.	24.	0.	10.	23.	-	4.9	5.4(68.)	1460.
2	455.	45.	549.	50.	25.	0.	15.	27.	-	5.5	5.9(69.)	1300.
3	613.	47.	660.	45.	18.	0.	21.	33.	-	10.0	10.6(71.)	750.
4	722.	62.	790.	50.	18.	0.	26.	25.	-	5.5	5.7(72.)	1300.
5	830.	30.	860.	60.	26.	0.	34.	33.	-	11.8	12.1(73.)	605.
6	980.	55.	1135.	20.	15.	0.	13.	25.	-	5.3	5.3(75.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
209	NENENE 14 2S 3W	1032	1054	1.46	100.	4997.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	46.	296.	100.	50.	0.	10.	15.	-	5.3	6.0(65.)	1350.
2	263.	28.	378.	50.	22.	0.	15.	21.	-	7.2	8.0(67.)	1010.
3	530.	25.	560.	45.	35.	0.	9.	15.	-	4.9	5.2(70.)	1460.
4	595.	43.	638.	50.	25.	0.	19.	25.	-	10.0	10.6(70.)	750.
5	710.	38.	815.	31.	22.	0.	14.	20.	-	5.7	7.0(72.)	1090.
6	840.	65.	905.	100.	30.	0.	25.	30.	-	22.0	22.5(73.)	357.
7	930.	50.	980.	80.	31.	0.	21.	25.	-	11.8	11.9(74.)	605.
8	1020.	30.	1050.	40.	21.	0.	11.	17.	-	5.3	5.3(75.)	1350.
9	1160.	18.	1190.	20.	15.	0.	-7.	-2.	-	2.1	2.0(77.)	3280.
10	1200.	20.	1220.	35.	20.	0.	10.	15.	-	5.3	5.1(78.)	1350.
11	1245.	20.	1265.	30.	18.	0.	-10.	-5.	-	2.1	2.0(78.)	3280.
12	1295.	26.	1322.	10.	13.	0.	-22.	-17.	-	1.4	1.3(79.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
210	NWNWNE 15 2S 3W	1057	454	1.66	167.	5107.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	30.	250.	45.	22.	0.	6.	8.	-	4.0	4.5(66.)	1780.
2	320.	20.	350.	15.	12.	0.	-8.	-6.	-	2.1	2.3(67.)	3280.
3	370.	30.	410.	15.	12.	0.	-18.	-15.	-	1.5	1.6(68.)	4400.

4	470.	40.	520.	15.	14.	0.	-7.	-5.	-	2.1	2.2(69.)	3280.
5	540.	23.	585.	25.	15.	0.	-5.	-3.	-	2.5	2.7(70.)	2730.
6	603.	30.	660.	25.	17.	0.	6.	10.	-	4.6	4.9(70.)	1540.
7	715.	55.	770.	40.	21.	0.	14.	15.	-	6.7	7.0(72.)	1090.
8	780.	40.	840.	45.	20.	0.	10.	12.	-	5.3	5.5(72.)	1350.
9	970.	25.	820.	45.	22.	0.	14.	16.	-	6.7	6.7(74.)	1090.
10	940.	60.	1000.	55.	25.	0.	16.	18.	-	7.7	7.8(74.)	960.
11	1040.	10.	1050.	15.	13.	0.	-6.	-4.	-	2.1	2.0(75.)	3280.
12	1102.	52.	1168.	15.	13.	0.	-12.	-10.	-	1.7	1.7(76.)	3920.
13	1200.	38.	1238.	10.	12.	0.	-25.	-23.	-	1.1	1.1(77.)	5700.
14	1260.	40.	1300.	15.	14.	0.	-12.	-10.	-	1.7	1.6(78.)	3920.
15	1320.	27.	1347.	8.	10.	0.	-30.	-28.	-	1.0	1.0(78.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
211	SWSWSE 15 2S 3W	927	1150	1.32	107.	5102.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	30.	240.	9.	9.	0.	-6.	2.	-	2.1	2.3(66.)	3280.
2	520.	30.	586.	25.	15.	0.	10.	18.	-	4.9	5.2(71.)	1460.
3	613.	17.	630.	25.	17.	0.	14.	23.	-	6.7	7.0(72.)	1090.
4	660.	65.	740.	40.	19.	0.	19.	27.	-	8.8	9.1(73.)	850.
5	762.	33.	795.	45.	16.	0.	25.	25.	-	7.7	7.8(74.)	960.
6	850.	15.	865.	30.	15.	0.	16.	25.	-	7.7	7.7(75.)	960.
7	920.	10.	930.	10.	10.	0.	-5.	3.	-	2.1	2.0(76.)	3280.
8	970.	50.	1020.	9.	12.	0.	-15.	-7.	-	1.5	1.5(77.)	4400.
9	1035.	50.	1122.	10.	10.	0.	-13.	-5.	-	1.5	1.5(78.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
212	SESWSW 15 2S 3W	932	1050	1.53	154.	3848.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	25.	215.	17.	12.	0.	-7.	-3.	-	2.1	2.3(66.)	3280.
2	230.	38.	268.	12.	10.	0.	-9.	-5.	-	2.1	2.3(66.)	3280.
3	457.	45.	502.	35.	16.	0.	10.	14.	-	5.3	5.7(69.)	1350.
4	513.	30.	543.	30.	15.	0.	12.	16.	-	5.5	5.8(70.)	1300.
5	585.	73.	658.	50.	17.	0.	20.	24.	-	10.8	11.4(71.)	680.
6	660.	62.	722.	55.	18.	0.	26.	26.	-	13.0	13.5(72.)	585.
7	732.	58.	795.	40.	17.	0.	17.	21.	-	8.2	8.4(73.)	900.
8	822.	55.	877.	32.	15.	0.	8.	12.	-	4.6	4.7(74.)	1540.
9	962.	35.	997.	11.	11.	0.	-24.	-20.	-	1.1	1.1(76.)	5700.
10	1035.	70.	1105.	14.	14.	0.	-20.	-16.	-	1.4	1.3(77.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
213	NENESE 16 2S 3W	948	252	1.45	174.	5320.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	45.	310.	20.	15.	0.	-2.	4.	-	2.6	3.0(66.)	2590.
2	542.	87.	660.	30.	16.	0.	15.	21.	-	7.2	7.6(71.)	1010.
3	695.	31.	926.	50.	19.	0.	22.	28.	-	13.0	13.3(73.)	585.
4	755.	65.	820.	50.	20.	0.	35.	33.	-	FRESH	FRESH	FRESH
5	860.	58.	940.	35.	16.	0.	19.	25.	-	10.0	10.0(75.)	750.

6	1013.	20.	1040.	11.	11.	0.	-14.	-8.	-	1.5	1.5(77.)	4400.
7	1050.	27.	1077.	10.	10.	0.	-20.	-14.	-	1.4	1.3(78.)	4820.
8	1130.	40.	1170.	7.	10.	0.	-35.	-30.	-	0.8	0.8(79.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
214	NENENW 16 2S 3W	0	554	1.13	361.	5675.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	20.	410.	11.	11.	0.	-8.	4.	-	2.1	2.2(68.)	3280.
2	455.	50.	550.	8.	10.	0.	-15.	-3.	-	1.5	1.6(69.)	4400.
3	590.	25.	615.	10.	10.	0.	-8.	4.	-	2.1	2.2(70.)	3280.
4	639.	22.	662.	20.	16.	0.	3.	15.	-	3.2	3.4(70.)	2180.
5	675.	70.	760.	25.	16.	0.	11.	23.	-	4.9	5.2(71.)	1460.
6	845.	35.	880.	35.	18.	0.	20.	32.	-	8.8	9.0(73.)	850.
7	910.	48.	958.	50.	20.	0.	24.	35.	-	13.0	13.2(74.)	585.
8	972.	45.	1037.	35.	18.	0.	18.	30.	-	7.7	7.8(74.)	960.
9	1090.	20.	1110.	20.	15.	0.	12.	24.	-	5.3	5.3(76.)	1350.
10	1198.	14.	1212.	7.	10.	0.	-20.	-9.	-	1.1	1.1(77.)	5700.
11	1239.	30.	1269.	7.	10.	0.	-31.	-19.	-	0.8	0.8(77.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
215	NWSENE 16 2S 3W	958	854	1.38	170.	5554.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	130.	460.	15.	11.	0.	-14.	-7.	-	1.5	1.7(66.)	4400.
2	490.	22.	512.	10.	10.	0.	-7.	-0.	-	2.1	2.2(69.)	3280.
3	545.	22.	567.	25.	15.	0.	-3.	4.	-	2.6	2.8(70.)	2590.
4	585.	35.	620.	25.	14.	0.	3.	10.	-	3.2	3.4(70.)	2180.
5	650.	50.	720.	35.	15.	0.	13.	20.	-	5.5	5.8(71.)	1300.
6	743.	63.	803.	40.	18.	0.	19.	25.	-	10.0	10.4(72.)	750.
7	845.	30.	870.	50.	25.	0.	23.	30.	-	14.0	14.4(73.)	550.
8	899.	90.	1035.	30.	16.	0.	15.	22.	-	6.7	6.8(73.)	1090.
9	1132.	25.	1165.	10.	10.	0.	-16.	-9.	-	1.5	1.5(76.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
216	SWSWNE 17 2S 3W	964	955	2.01	202.	5022.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	23.	348.	15.	13.	0.	-2.	-5.	-	2.6	3.0(67.)	2590.
2	470.	30.	530.	12.	12.	0.	-7.	-10.	-	2.5	2.7(68.)	2730.
3	540.	78.	630.	25.	15.	0.	-5.	-8.	-	2.6	2.9(69.)	2590.
4	720.	75.	832.	40.	20.	0.	12.	9.	-	6.7	7.0(71.)	1090.
5	850.	50.	900.	45.	20.	0.	11.	8.	-	5.5	5.7(72.)	1300.
6	912.	28.	930.	25.	17.	0.	1.	-2.	-	3.2	3.3(73.)	2180.
7	950.	25.	993.	13.	13.	0.	-20.	-23.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
217	NENENW 17 2S 3W	982	1151	1.83	248.	4649.	0.91

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	300.	20.	340.	11.	13.	0.	-10.	-12.	-	2.1	2.3(66.)	3280.
2	370.	40.	410.	10.	14.	0.	-20.	-20.	-	1.4	1.5(67.)	4850.
3	470.	23.	493.	11.	15.	0.	-24.	-24.	-	1.1	1.3(68.)	5700.
4	645.	23.	680.	14.	14.	0.	-10.	-10.	-	2.1	2.2(69.)	3280.
5	710.	20.	730.	25.	20.	0.	-5.	-5.	-	2.5	2.7(70.)	2730.
6	770.	40.	810.	40.	25.	0.	9.	9.	-	4.9	5.2(71.)	1460.
7	835.	90.	950.	35.	22.	0.	7.	7.	-	4.6	4.8(71.)	1540.
8	980.	37.	1020.	12.	15.	0.	-22.	-22.	-	1.4	1.4(72.)	4850.
9	1045.	25.	1073.	10.	15.	0.	-28.	-28.	-	1.0	1.0(73.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
218	NWNWSE 17 2S 3W	987	755	1.83	210.	5203.	1.43

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	330.	23.	353.	10.	17.	0.	-3.	-3.	-	2.6	2.9(68.)	2590.
2	420.	110.	640.	20.	20.	0.	-10.	-10.	-	2.1	2.2(70.)	3280.
3	720.	28.	748.	45.	20.	0.	13.	13.	-	6.7	6.8(74.)	1090.
4	780.	50.	830.	40.	18.	0.	9.	9.	-	4.9	4.9(75.)	1460.
5	850.	50.	900.	45.	18.	0.	15.	15.	-	7.7	7.6(76.)	960.
6	913.	45.	970.	20.	15.	0.	-8.	-8.	-	2.1	2.0(77.)	3280.
7	989.	45.	1025.	15.	14.	0.	-13.	-14.	-	1.7	1.5(78.)	3920.
8	1040.	20.	1060.	10.	10.	0.	-25.	-25.	-	1.1	1.1(78.)	5700.
9	1070.	32.	1102.	5.	9.	0.	-38.	-38.	-	0.7	0.6(79.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
219	SLSESW 17 2S 3W	967	153	1.68	337.	5051.	0.96

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	493.	22.	558.	15.	12.	0.	-7.	-5.	-	2.1	2.2(68.)	3280.
2	700.	60.	770.	45.	25.	0.	17.	19.	-	8.2	8.7(70.)	900.
3	780.	35.	815.	35.	17.	0.	12.	14.	-	5.5	5.8(71.)	1300.
4	825.	33.	858.	30.	16.	0.	6.	8.	-	4.0	4.2(71.)	1780.
5	884.	36.	920.	10.	10.	0.	-12.	-10.	-	1.7	1.8(72.)	3920.
6	930.	17.	947.	13.	13.	0.	-15.	-13.	-	1.5	1.5(72.)	4400.
7	960.	38.	1000.	10.	10.	0.	-25.	-23.	-	1.1	1.2(73.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
220	SESENW 18 2S 3W	984	553	1.59	95.	5016.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	460.	45.	517.	20.	17.	0.	3.	6.	-	3.8	4.1(69.)	1860.
2	555.	37.	622.	25.	20.	0.	7.	10.	-	4.0	4.3(70.)	1780.
3	652.	20.	702.	25.	25.	0.	13.	15.	-	5.5	5.8(71.)	1300.
4	743.	27.	770.	25.	17.	0.	3.	5.	-	3.8	3.9(72.)	1860.
5	780.	38.	818.	13.	10.	0.	-13.	-10.	-	1.7	1.8(73.)	3920.
6	842.	36.	878.	12.	12.	0.	-15.	-12.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

221		SWSWNE 18 2S 3W		984	353	1.22		137.	4625.		1.22			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED		SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	175.	17.	192.	25.	20.	0.		10.	20.	-	FRESH	FRESH		FRESH
2	253.	50.	300.	25.	15.	0.		5.	15.	-	3.8	4.2(67.)		1460.
3	493.	90.	580.	40.	19.	0.		10.	20.	-	4.9	5.3(69.)		1460.
4	700.	10.	710.	20.	21.	0.		12.	23.	-	5.5	5.7(72.)		1300.
5	739.	35.	785.	25.	19.	0.		8.	18.	-	4.0	4.1(72.)		1780.
6	790.	32.	822.	11.	10.	0.		-14.	-9.	-	1.5	1.5(73.)		4400.
7	864.	33.	897.	7.	7.	0.		-26.	-15.	-	1.0	1.0(74.)		6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
222	NWNWSE 18 2S 3W	994	654	1.51	120.	5262.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	175.	12.	187.	45.	20.	0.	18.	25.	-	11.8	13.3(66.)	605.
2	217.	70.	430.	20.	12.	0.	7.	12.	-	4.0	4.5(66.)	1780.
3	469.	60.	622.	30.	12.	0.	13.	18.	-	5.5	5.9(69.)	1300.
4	678.	29.	707.	20.	11.	0.	20.	25.	-	10.8	11.2(72.)	620.
5	727.	66.	793.	25.	9.	0.	18.	23.	-	8.8	9.1(73.)	850.
6	957.	23.	1000.	7.	7.	0.	-19.	-14.	-	1.4	1.5(75.)	4850.
7	1050.	30.	1130.	6.	6.	0.	-26.	-21.	-	1.1	1.1(77.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
223	SWSWSW 18 2S 3W	0	952	0.95	201.	4251.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	225.	45.	360.	50.	19.	0.	-4.	11.	-	2.1	2.3(67.)	3280.
2	430.	40.	470.	60.	40.	0.	-7.	8.	-	1.7	1.8(69.)	3520.
3	545.	27.	572.	50.	17.	0.	-8.	23.	-	3.8	3.9(71.)	1860.
4	670.	70.	767.	40.	15.	0.	-7.	8.	-	1.7	1.7(73.)	3520.
5	760.	40.	800.	40.	14.	0.	-15.	-6.	-	1.4	1.4(74.)	4850.
6	895.	20.	882.	10.	10.	0.	-27.	-13.	-	0.8	0.8(76.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
224	SESWSE 19 2S 3W	1039	954	2.09	135.	3841.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	40.	225.	36.	20.	0.	-5.	2.	-	4.0	4.5(65.)	1780.
2	280.	20.	300.	18.	15.	0.	-7.	-10.	-	2.5	2.8(67.)	2730.
3	496.	27.	523.	30.	20.	0.	-15.	-18.	-	1.5	1.6(69.)	4400.
4	609.	16.	616.	14.	14.	0.	-8.	-11.	-	2.1	2.2(70.)	3280.
5	680.	20.	700.	14.	17.	0.	-11.	-14.	-	2.1	2.1(71.)	3280.
6	747.	33.	665.	10.	10.	0.	-10.	-13.	-	2.1	2.1(72.)	3280.
7	888.	52.	940.	10.	15.	0.	-33.	-36.	-	0.8	0.8(74.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
225	NWSESW 19 2S 3W	1035	756	1.42	77.	4994.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	123.	38.	160.	50.	35.	0.	6.	14.	-	FRESH	FRESH	FRESH
2	190.	45.	280.	30.	17.	0.	4.	10.	-	3.8	4.2(66.)	1860.
3	385.	130.	740.	30.	30.	0.	-6.	0.	-	2.1	2.2(68.)	3280.
4	760.	48.	808.	10.	10.	0.	-8.	-2.	-	2.1	2.1(73.)	3280.
5	810.	23.	833.	15.	15.	0.	-12.	-6.	-	1.7	1.7(73.)	3920.
6	880.	45.	925.	5.	15.	0.	-36.	-30.	-	0.7	0.7(74.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
226	NENENE 20 2S 3W	955	1054	1.42	290.	6807.	0.92

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	515.	15.	530.	27.	17.	0.	5.	12.	-	4.0	4.4(68.)	1780.
2	663.	22.	707.	37.	20.	0.	10.	15.	-	5.3	5.7(70.)	1350.
3	720.	55.	780.	46.	17.	0.	17.	23.	-	8.2	8.7(70.)	900.
4	795.	60.	880.	50.	15.	0.	14.	20.	-	5.7	7.1(71.)	1090.
5	890.	80.	970.	25.	13.	0.	5.	11.	-	4.0	4.2(72.)	1780.
6	1000.	32.	1037.	8.	8.	0.	-20.	-14.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
227	NENENW 20 2S 3W	960	453	1.40	340.	6197.	0.98

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	475.	25.	950.	20.	20.	0.	-4.	3.	-	2.5	2.7(68.)	2730.
2	650.	73.	770.	45.	35.	0.	9.	16.	-	4.9	5.2(70.)	1460.
3	785.	41.	840.	30.	21.	0.	5.	12.	-	4.0	4.2(71.)	1780.
4	875.	42.	925.	15.	15.	0.	-11.	-4.	-	1.7	1.8(72.)	3920.
5	941.	30.	981.	10.	10.	0.	-18.	-11.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
228	SWSESE 20 2S 3W	1009	254	1.70	270.	5003.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	395.	55.	550.	20.	20.	0.	-2.	-0.	-	2.6	2.9(68.)	2590.
2	575.	15.	590.	20.	20.	0.	-5.	-4.	-	2.5	2.7(70.)	2730.
3	610.	75.	790.	50.	30.	0.	9.	11.	-	4.9	5.2(70.)	1460.
4	820.	62.	882.	25.	15.	0.	-6.	-4.	-	2.5	2.5(73.)	2730.
5	920.	15.	935.	8.	15.	0.	-32.	-31.	-	0.8	0.8(74.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
229	NENWSW 20 2S 3W	0	155	1.23	268.	4372.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	408.	24.	432.	15.	25.	0.	-4.	6.	-	2.5	2.7(68.)	2730.
2	470.	20.	490.	50.	50.	0.	3.	13.	-	3.2	3.4(69.)	2180.

3	554.	35.	610.	30.	23.	0.	-5.	5.	-	2.1	2.2(70.)	3280.
4	680.	38.	700.	30.	28.	0.	5.	15.	-	3.8	3.9(72.)	1860.
5	730.	54.	784.	35.	18.	0.	10.	20.	-	4.9	5.1(72.)	1460.
6	861.	30.	903.	15.	20.	0.	-17.	-7.	-	1.5	1.5(74.)	4400.
7	908.	40.	948.	10.	12.	0.	-27.	-18.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
230	SESWNW 21 2S 3W	0	758	1.70	190.	4971.	0.65

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	60.	180.	30.	25.	0.	-5.	7.	-	18.7	21.5(64.)	330.
2	210.	50.	285.	17.	17.	0.	-5.	-3.	-	2.5	2.9(65.)	2730.
3	460.	95.	611.	17.	17.	0.	-6.	-4.	-	2.5	2.8(67.)	2730.
4	630.	12.	642.	20.	15.	0.	8.	10.	-	4.9	5.4(68.)	1460.
5	693.	60.	760.	20.	20.	0.	14.	15.	-	7.2	7.9(69.)	1010.
6	770.	30.	800.	19.	19.	0.	6.	10.	-	4.6	5.0(69.)	1540.
7	808.	56.	916.	16.	16.	0.	-5.	-3.	-	2.5	2.7(69.)	2730.
8	948.	17.	965.	8.	10.	0.	-40.	-39.	-	0.7	0.7(70.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
231	SESWNE 21 2S 3W	950	954	1.10	160.	3735.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	330.	30.	360.	50.	23.	0.	7.	13.	-	4.0	4.4(68.)	1780.
2	430.	65.	527.	35.	16.	0.	18.	30.	-	7.7	8.3(69.)	960.
3	590.	32.	622.	50.	18.	0.	32.	32.	-	8.8	9.2(71.)	850.
4	640.	83.	755.	50.	20.	0.	42.	42.	-	FRESH	FRESH	FRESH
5	770.	30.	820.	25.	15.	0.	35.	35.	-	11.8	12.0(73.)	605.
6	660.	10.	670.	13.	13.	0.	12.	23.	-	5.3	5.5(72.)	1350.
7	925.	10.	935.	14.	10.	0.	-6.	5.	-	2.1	2.0(75.)	3280.
8	980.	42.	1022.	10.	8.	0.	-16.	-4.	-	1.5	1.5(76.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
232	NESWSE 21 2S 3W	0	1053	1.49	88.	4711.	0.94

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	143.	27.	170.	45.	27.	0.	5.	10.	-	18.7	21.3(65.)	330.
2	340.	50.	440.	40.	15.	0.	12.	17.	-	5.5	6.1(67.)	1300.
3	465.	62.	565.	50.	17.	0.	25.	30.	-	27.0	29.5(68.)	292.
4	580.	60.	650.	45.	15.	0.	30.	30.	-	27.0	29.1(69.)	292.
5	680.	30.	718.	30.	12.	0.	20.	25.	-	10.8	11.5(70.)	680.
6	750.	20.	770.	20.	12.	0.	11.	15.	-	5.3	5.6(71.)	1350.
7	872.	35.	910.	10.	10.	0.	-14.	-9.	-	1.5	1.5(72.)	4400.
8	950.	22.	980.	10.	10.	0.	-20.	-15.	-	1.4	1.4(72.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
233	NENESW 21 2S 3W	991	751	1.28	109.	5025.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	170.	20.	230.	40.	30.	0.	5.	14.	-	18.7	21.2(65.)	330.
2	420.	45.	537.	25.	17.	0.	10.	19.	-	4.9	5.3(68.)	1460.
3	590.	40.	630.	45.	20.	0.	26.	25.	-	8.2	8.7(70.)	900.
4	650.	80.	740.	50.	20.	0.	30.	30.	-	11.8	12.4(71.)	605.
5	753.	33.	820.	30.	14.	0.	15.	22.	-	5.5	5.7(72.)	1300.
6	855.	21.	876.	10.	9.	0.	-12.	-3.	-	1.7	1.7(73.)	3920.
7	920.	50.	1045.	7.	7.	0.	-26.	-17.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
234	NWSWSE 22 2S 3W	960	151	1.33	100.	4998.	1.27

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	340.	60.	430.	50.	25.	0.	20.	29.	-	10.8	11.8(68.)	680.
2	463.	57.	520.	55.	25.	0.	35.	35.	-	FRESH	FRESH	FRESH
3	540.	20.	560.	25.	13.	0.	25.	25.	-	8.2	8.7(70.)	900.
4	580.	60.	650.	50.	15.	0.	32.	32.	-	17.0	17.9(71.)	458.
5	640.	40.	720.	30.	15.	0.	23.	31.	-	14.0	14.5(72.)	550.
6	830.	15.	845.	10.	10.	0.	-10.	-2.	-	1.7	1.7(74.)	3920.
7	954.	19.	973.	12.	10.	0.	-12.	-4.	-	1.7	1.7(76.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
235	SWNESW 22 2S 3W	992	1050	1.48	94.	4033.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	30.	170.	30.	25.	0.	8.	13.	-	FRESH	FRESH	FRESH
2	230.	45.	310.	15.	12.	0.	2.	7.	-	3.2	3.6(66.)	2180.
3	389.	53.	420.	30.	15.	0.	15.	20.	-	7.2	7.8(68.)	1010.
4	519.	50.	579.	35.	16.	0.	28.	28.	-	17.0	18.1(70.)	458.
5	580.	20.	600.	35.	16.	0.	32.	33.	-	FRESH	FRESH	FRESH
6	608.	40.	685.	35.	16.	0.	35.	25.	-	10.8	11.3(71.)	680.
7	725.	35.	760.	35.	15.	0.	29.	29.	-	19.0	19.6(73.)	407.
8	860.	70.	1016.	9.	10.	0.	-16.	-11.	-	1.5	1.5(74.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
236	NESENW 22 2S 3W	985	4050	0.95	94.	4493.	1.39

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	32.	222.	27.	11.	0.	10.	25.	-	18.7	21.0(66.)	330.
2	500.	42.	590.	20.	18.	0.	15.	30.	-	5.5	5.9(70.)	1300.
3	602.	73.	705.	40.	15.	0.	26.	26.	-	4.6	4.8(72.)	1540.
4	715.	75.	840.	30.	15.	0.	25.	40.	-	11.8	12.0(73.)	605.
5	908.	153.	1105.	10.	11.	0.	-11.	4.	-	1.5	1.5(76.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
237	SESWNE 22 2S 3W	975	351	1.29	139.	4257.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	180.	40.	220.	40.	15.	0.	-2.	11.	-	8.8	9.3(66.)	700.
2	339.	22.	352.	11.	11.	0.	-5.	4.	-	2.5	2.7(68.)	2730.
3	428.	50.	530.	27.	22.	0.	5.	14.	-	3.8	4.0(69.)	1860.
4	590.	20.	610.	40.	20.	0.	10.	18.	-	4.9	5.1(71.)	1460.
5	632.	28.	660.	45.	22.	0.	15.	24.	-	6.7	7.0(72.)	1090.
6	670.	40.	710.	55.	23.	0.	19.	28.	-	8.8	9.1(72.)	850.
7	720.	66.	820.	45.	20.	0.	10.	19.	-	4.9	5.0(73.)	1460.
8	885.	37.	926.	12.	12.	0.	-11.	-2.	-	1.7	1.7(75.)	3920.
9	940.	80.	1070.	15.	15.	0.	-5.	4.	-	2.5	2.5(76.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
238	SLNWSW 23 2S 3W	936	551	1.27	195.	4348.	1.00

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	360.	53.	413.	40.	15.	0.	10.	19.	-	4.9	5.4(67.)	1660.
2	470.	86.	620.	35.	15.	0.	16.	25.	-	7.2	7.9(68.)	1010.
3	673.	12.	705.	17.	10.	0.	-5.	14.	-	3.8	4.0(70.)	1860.
4	790.	25.	815.	30.	17.	0.	-3.	5.	-	2.5	2.5(71.)	2730.
5	890.	15.	905.	10.	12.	0.	-30.	-21.	-	0.8	0.8(73.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
239	NENENE 23 2S 3W	952	1254	1.13	225.	6038.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	10.	270.	32.	15.	0.	6.	18.	-	4.0	4.5(66.)	1780.
2	340.	55.	425.	25.	15.	0.	10.	22.	-	4.6	5.1(67.)	1540.
3	563.	57.	620.	45.	15.	0.	23.	35.	-	13.0	15.9(69.)	585.
4	705.	90.	820.	60.	15.	0.	25.	37.	-	17.0	17.9(71.)	458.
5	850.	35.	892.	30.	15.	0.	9.	21.	-	4.0	4.1(73.)	1780.
6	1020.	35.	1055.	22.	13.	0.	-5.	7.	-	2.1	2.1(74.)	3280.
7	1090.	40.	1178.	20.	12.	0.	-10.	1.	-	1.7	1.7(75.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
240	SENWNW 23 2S 3W	927	1151	1.17	242.	7500.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	90.	560.	40.	20.	0.	27.	27.	-	7.2	7.9(68.)	1010.
2	580.	110.	690.	100.	30.	0.	57.	57.	-	FRESH	FRESH	FRESH
3	725.	80.	630.	30.	10.	0.	39.	39.	-	FRESH	FRESH	FRESH
4	880.	40.	920.	35.	12.	0.	37.	37.	-	22.0	22.2(74.)	357.
5	940.	30.	970.	18.	10.	0.	15.	26.	-	5.5	5.5(75.)	1300.
6	1080.	60.	1140.	8.	5.	0.	-16.	-5.	-	1.5	1.5(77.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
241	SWSWNW 24 2S 3W	971	1251	1.10	369.	4503.	1.30

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	400.	22.	422.	45.	21.	0.	30.	31.	-	8.2	8.9(69.)	900.

2	480.	47.	560.	50.	18.	0.	22.	34.	-	10.8	11.5(70.)	680.
3	590.	35.	625.	60.	32.	0.	28.	28.	-	6.7	7.0(71.)	1090.
4	690.	50.	716.	50.	17.	0.	24.	36.	-	13.0	13.4(72.)	585.
5	810.	21.	831.	45.	19.	0.	15.	29.	-	5.5	5.6(74.)	1300.
6	905.	40.	945.	25.	16.	0.	-7.	5.	-	2.1	2.0(75.)	3280.
7	965.	20.	985.	10.	7.	0.	-12.	-0.	-	1.5	1.5(76.)	4400.
8	1050.	11.	1065.	6.	10.	0.	-25.	-14.	-	1.0	1.0(77.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
242	NWSWSE 24 2S 3W	909	757	1.83	125.	4236.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	360.	32.	392.	40.	25.	0.	13.	13.	-	6.7	7.4(68.)	1090.
2	455.	65.	520.	50.	23.	0.	16.	15.	-	8.2	8.9(69.)	900.
3	540.	40.	580.	100.	45.	0.	20.	20.	-	11.8	12.6(70.)	605.
4	615.	70.	870.	20.	20.	0.	11.	11.	-	5.5	5.8(71.)	1300.
5	890.	13.	903.	35.	30.	0.	-10.	-11.	-	2.1	2.1(74.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
243	NWNWSE 25 2S 3W	991	552	1.70	435.	4876.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	20.	190.	50.	45.	0.	11.	13.	-	FRESH	FRESH	FRESH
2	525.	17.	540.	25.	17.	0.	6.	8.	-	4.0	4.2(71.)	1780.
3	552.	18.	570.	35.	20.	0.	15.	17.	-	7.7	8.1(71.)	960.
4	610.	45.	708.	50.	25.	0.	10.	12.	-	5.3	5.5(72.)	1350.
5	750.	40.	826.	50.	25.	0.	4.	6.	-	3.8	3.8(74.)	1860.
6	855.	27.	882.	50.	40.	0.	-18.	-17.	-	1.5	1.5(75.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
244	SENWNW 25 2S 3W	923	957	1.33	415.	4438.	0.94

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	467.	18.	505.	35.	17.	0.	17.	25.	-	8.2	9.0(68.)	900.
2	552.	21.	573.	50.	30.	0.	10.	18.	-	5.3	5.7(69.)	1350.
3	680.	23.	720.	40.	20.	0.	4.	14.	-	4.6	4.9(70.)	1540.
4	750.	20.	770.	35.	25.	0.	-5.	3.	-	2.5	2.6(71.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
245	SWNWNE 25 2S 3W	955	652	1.11	230.	6500.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	315.	50.	380.	35.	17.	0.	18.	30.	-	7.7	8.5(67.)	960.
2	430.	10.	440.	20.	12.	0.	26.	30.	-	7.7	8.4(69.)	960.
3	469.	60.	555.	36.	15.	0.	30.	30.	-	7.7	8.3(69.)	960.
4	635.	35.	680.	22.	16.	0.	12.	24.	-	4.9	5.2(71.)	1460.
5	730.	70.	830.	38.	16.	0.	27.	27.	-	5.5	5.7(72.)	1300.
6	863.	17.	880.	35.	25.	0.	-3.	9.	-	2.5	2.5(74.)	2730.

7	922.	10.	932.	30.	16.	0.	-16.	-7.	-	1.4	1.4(74.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
246	SW 25 2S 3W	1001	477	1.55	56.	3945.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	95.	85.	495.	25.	25.	0.	-5.	-1.	25.5	4.4	5.0(65.)	1400.
2	530.	28.	570.	25.	25.	0.	2.	5.	28.5	3.2	3.4(69.)	2180.
3	599.	40.	630.	35.	35.	0.	3.	7.	31.5	3.8	4.0(70.)	1860.
4	670.	56.	726.	25.	25.	0.	-9.	-5.	28.5	2.1	2.2(71.)	3280.
5	768.	16.	784.	12.	15.	0.	-10.	-5.	21.2	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
247	NWSENE 26 2S 3W	945	1256	1.42	440.	4750.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	450.	43.	493.	50.	20.	0.	23.	29.	-	17.0	18.5(68.)	458.
2	520.	65.	585.	110.	22.	0.	35.	35.	-	FRESH	FRESH	FRESH
3	615.	59.	675.	30.	16.	0.	21.	27.	-	11.8	12.6(70.)	605.
4	740.	20.	775.	16.	11.	0.	3.	9.	-	3.2	3.4(71.)	2180.
5	810.	10.	820.	10.	15.	0.	-16.	-11.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
248	SENWNW 26 2S 3W	996	251	1.31	169.	4500.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	320.	42.	365.	40.	25.	0.	6.	14.	-	4.0	4.4(67.)	1780.
2	455.	50.	597.	50.	32.	0.	20.	28.	-	10.8	11.7(69.)	680.
3	625.	47.	672.	50.	32.	0.	22.	30.	-	13.0	13.8(70.)	585.
4	770.	15.	785.	30.	23.	0.	16.	26.	-	7.7	8.0(72.)	960.
5	863.	10.	873.	15.	15.	0.	-6.	-2.	-	2.1	2.1(73.)	3280.
6	925.	52.	982.	15.	15.	0.	-11.	-3.	-	1.7	1.7(74.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
249	NWSWSW 26 2S 3W	998	851	1.52	170.	4172.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	32.	232.	50.	18.	0.	-3.	1.	-	2.6	3.0(66.)	2590.
2	385.	120.	600.	50.	27.	0.	13.	17.	-	5.5	6.0(68.)	1300.
3	630.	10.	640.	30.	17.	0.	7.	13.	-	4.6	4.8(71.)	1540.
4	670.	23.	693.	15.	15.	0.	-6.	-2.	-	2.1	2.1(72.)	3280.
5	736.	55.	795.	22.	20.	0.	-16.	-12.	-	1.5	1.5(72.)	4400.
6	607.	20.	643.	13.	15.	0.	-20.	-15.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
250	NWSESW 27 2S 3W	0	751	1.07	237.	4658.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	277.	30.	337.	40.	18.	0.	-4.	8.	-	2.1	2.3(67.)	3280.
2	445.	20.	460.	30.	20.	0.	5.	19.	-	3.2	3.4(70.)	2180.
3	550.	55.	625.	40.	30.	0.	14.	27.	-	5.5	5.9(71.)	1300.
4	665.	25.	690.	60.	31.	0.	20.	33.	-	8.8	9.1(73.)	850.
5	738.	28.	763.	45.	25.	0.	16.	29.	-	6.7	6.8(74.)	1090.
6	775.	55.	856.	40.	20.	0.	8.	21.	-	4.0	4.0(74.)	1780.
7	930.	20.	950.	13.	15.	0.	-14.	-2.	-	1.5	1.5(76.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
251	SWSWSE 27 2S 3W	1025	651	1.71	333.	4541.	1.60

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	360.	70.	530.	45.	30.	0.	5.	5.	-	4.0	4.3(69.)	1780.
2	565.	80.	670.	50.	30.	0.	10.	11.	-	5.3	5.5(73.)	1350.
3	684.	11.	695.	33.	16.	0.	-5.	-4.	-	2.5	2.5(74.)	2730.
4	740.	20.	760.	20.	20.	0.	-12.	-11.	-	1.7	1.7(75.)	3920.
5	810.	30.	854.	10.	11.	0.	-18.	-17.	-	1.5	1.5(76.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
252	SWSWNE 27 2S 3W	1033	1251	1.83	405.	4156.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	440.	110.	640.	40.	20.	0.	15.	15.	-	7.7	8.3(69.)	960.
2	668.	32.	700.	30.	17.	0.	2.	2.	-	3.2	3.3(72.)	2180.
3	720.	13.	737.	15.	15.	0.	-15.	-15.	-	1.5	1.5(72.)	4400.
4	805.	35.	860.	10.	15.	0.	-18.	-18.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
253	NESENW 27 2S 3W	1048	1150	1.40	103.	4207.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	32.	162.	15.	15.	0.	6.	13.	-	18.7	21.3(65.)	330.
2	300.	35.	406.	17.	17.	0.	10.	17.	-	4.9	5.4(67.)	1460.
3	482.	31.	513.	30.	20.	0.	20.	27.	-	10.8	11.6(70.)	680.
4	530.	50.	580.	50.	22.	0.	25.	25.	-	8.8	9.4(70.)	850.
5	600.	75.	697.	30.	18.	0.	23.	30.	-	14.0	14.7(71.)	550.
6	730.	40.	780.	15.	14.	0.	3.	10.	-	3.2	3.3(73.)	2180.
7	790.	77.	867.	12.	13.	0.	-16.	-9.	-	1.5	1.5(73.)	4400.
8	880.	55.	965.	9.	9.	0.	-22.	-15.	-	1.1	1.2(74.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
254	SENENE 28 2S 3W	1048	650	1.55	58.	4186.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	40.	215.	25.	17.	0.	2.	5.	-	8.8	10.1(64.)	700.

2	320.	30.	500.	50.	20.	0.	10.	14.	-	5.3	5.8(67.)	1350.
3	530.	20.	550.	30.	18.	0.	18.	22.	-	10.0	10.5(70.)	750.
4	620.	36.	656.	40.	20.	0.	20.	24.	-	10.8	11.3(71.)	680.
5	639.	35.	720.	30.	20.	0.	13.	17.	-	5.5	5.8(71.)	1300.
6	730.	40.	770.	30.	20.	0.	-2.	2.	-	2.6	2.7(72.)	2590.
7	840.	32.	872.	10.	17.	0.	-28.	-24.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
255	NESESE 28 2S 3W	0	951	1.41	163.	5253.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	385.	20.	460.	40.	25.	0.	5.	12.	-	4.0	4.4(68.)	1780.
2	540.	20.	560.	30.	30.	0.	15.	22.	-	7.2	7.6(70.)	1010.
3	590.	70.	667.	45.	25.	0.	22.	28.	-	13.0	13.7(71.)	585.
4	693.	50.	740.	50.	22.	0.	18.	24.	-	8.8	9.1(72.)	850.
5	765.	21.	786.	20.	14.	0.	7.	13.	-	4.0	4.1(73.)	1780.
6	815.	135.	1008.	12.	12.	0.	-15.	-9.	-	1.5	1.5(74.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
256	NENWSW 28 2S 3W	1047	752	1.59	161.	4174.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	250.	50.	535.	30.	30.	0.	2.	5.	-	3.2	3.5(67.)	2180.
2	618.	26.	644.	35.	30.	0.	15.	18.	-	7.2	7.5(72.)	1010.
3	675.	40.	732.	35.	31.	0.	21.	25.	-	13.0	13.3(73.)	585.
4	752.	48.	800.	40.	23.	0.	16.	20.	-	7.7	7.8(74.)	960.
5	820.	25.	852.	25.	17.	0.	12.	15.	-	5.5	5.5(75.)	1300.
6	912.	28.	940.	10.	10.	0.	-22.	-19.	-	1.4	1.3(76.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
257	NENWSW 29 2S 3W	1083	854	1.68	352.	4798.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	368.	20.	570.	30.	30.	0.	-7.	-5.	-	2.1	2.3(68.)	3280.
2	610.	50.	660.	25.	25.	0.	-10.	-8.	-	2.1	2.2(70.)	3280.
3	700.	95.	820.	30.	30.	0.	1.	3.	-	3.2	3.3(71.)	2180.
4	830.	30.	860.	33.	30.	0.	5.	7.	-	4.0	4.1(73.)	1780.
5	882.	28.	910.	12.	25.	0.	-10.	-8.	-	2.1	2.1(74.)	3280.
6	920.	10.	930.	16.	16.	0.	-16.	-15.	-	1.5	1.5(74.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
258	SESENW 29 2S 3W	1065	353	1.47	103.	4679.	1.55

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	70.	200.	50.	30.	0.	6.	11.	-	18.7	21.3(65.)	330.
2	433.	70.	608.	35.	25.	0.	-6.	-1.	-	2.1	2.2(70.)	3280.
3	648.	103.	810.	35.	20.	0.	7.	12.	-	4.0	4.1(74.)	1780.
4	890.	60.	930.	16.	16.	0.	-12.	-7.	-	1.7	1.7(77.)	3920.
5	940.	50.	1003.	13.	13.	0.	-20.	-15.	-	1.4	1.3(78.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
259	NWNWSE 29 2S 3W	1022	952	1.28	104.	4938.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	187.	30.	415.	30.	18.	0.	5.	14.	-	3.8	4.2(66.)	1860.
2	430.	60.	560.	30.	15.	0.	1.	10.	-	3.2	3.5(69.)	2180.
3	610.	50.	700.	25.	15.	0.	10.	19.	-	4.9	5.2(71.)	1460.
4	710.	50.	770.	35.	16.	0.	12.	21.	-	5.5	5.7(72.)	1300.
5	853.	20.	873.	13.	13.	0.	-5.	4.	-	2.1	2.1(74.)	3280.
6	900.	40.	940.	20.	14.	0.	-11.	-2.	-	1.7	1.7(74.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
260	NWNESE 30 2S 3W	1056	753	1.54	304.	4867.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	330.	35.	415.	25.	20.	0.	-6.	-2.	-	2.8	3.1(67.)	2200.
2	503.	50.	623.	30.	20.	0.	-11.	-7.	-	1.7	1.8(69.)	3920.
3	710.	30.	740.	30.	16.	0.	-15.	-11.	-	1.5	1.6(72.)	4400.
4	765.	75.	840.	22.	18.	0.	-12.	-8.	-	1.7	1.8(72.)	3920.
5	850.	15.	865.	15.	12.	0.	-20.	-17.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
261	SENENE 30 2S 3W	1073	852	1.55	116.	5085.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	175.	45.	275.	50.	25.	0.	10.	14.	-	FRESH	FRESH	FRESH
2	365.	10.	375.	30.	16.	0.	-2.	2.	-	2.6	2.9(68.)	2590.
3	520.	60.	585.	20.	16.	0.	-14.	-10.	-	1.5	1.6(70.)	4400.
4	640.	60.	760.	25.	20.	0.	-6.	-2.	-	2.5	2.6(71.)	2730.
5	770.	20.	790.	15.	15.	0.	-11.	-7.	-	1.7	1.8(73.)	3920.
6	820.	40.	860.	20.	16.	0.	-10.	-5.	-	2.1	2.1(73.)	3280.
7	900.	22.	922.	9.	15.	0.	-22.	-18.	-	1.4	1.4(74.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
262	NWNENW 30 2S 3W	1007	1152	1.26	104.	5455.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	72.	210.	40.	20.	0.	7.	15.	-	18.7	21.3(65.)	330.
2	368.	23.	430.	40.	17.	0.	-5.	4.	-	2.1	2.2(68.)	3280.
3	460.	45.	510.	16.	17.	0.	-8.	1.	-	2.1	2.2(69.)	3280.
4	650.	30.	690.	30.	15.	0.	-12.	-3.	-	1.5	1.6(71.)	4400.
5	710.	80.	795.	20.	13.	0.	-14.	-5.	-	1.5	1.6(72.)	4400.
6	805.	16.	821.	15.	10.	0.	-18.	-10.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
263	SENENE 32 2S 3W	1106	1051	1.47	194.	4267.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	250.	22.	272.	20.	15.	0.	-3.	2.	-	5.4	6.0(66.)	1130.
2	318.	32.	350.	20.	20.	0.	-13.	-8.	-	1.6	1.8(67.)	3750.
3	440.	20.	460.	10.	10.	0.	-6.	-1.	-	2.1	2.2(69.)	3280.
4	520.	72.	610.	13.	15.	0.	-11.	-5.	-	1.7	1.8(70.)	3920.
5	710.	20.	730.	10.	13.	0.	-13.	-8.	-	1.5	1.6(72.)	4400.
6	730.	65.	795.	40.	26.	0.	6.	11.	-	4.0	4.1(72.)	1780.
7	910.	30.	965.	35.	25.	0.	-8.	-3.	-	2.1	2.1(74.)	3280.
8	970.	17.	987.	32.	25.	0.	-10.	-5.	-	1.7	1.7(75.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
264	NESWNE 33 2S 3W	1128	750	1.38	156.	4502.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	185.	25.	210.	35.	35.	0.	4.	11.	-	16.3	18.4(66.)	375.
2	240.	60.	340.	22.	22.	0.	-5.	2.	-	4.4	4.9(67.)	1400.
3	360.	15.	375.	20.	20.	0.	-8.	-1.	-	2.1	2.2(68.)	3280.
4	500.	40.	595.	30.	30.	0.	-10.	-3.	-	1.7	1.8(70.)	3920.
5	645.	40.	715.	35.	35.	0.	-8.	-1.	-	2.1	2.1(72.)	3280.
6	730.	50.	780.	45.	31.	0.	13.	20.	-	5.5	5.7(73.)	1300.
7	820.	50.	870.	40.	32.	0.	9.	16.	-	4.6	4.7(74.)	1540.
8	910.	18.	928.	22.	22.	0.	-6.	1.	-	2.1	2.1(75.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
265	NENWSW 33 2S 3W	0	654	1.97	196.	4995.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	285.	35.	320.	20.	15.	0.	-5.	-7.	-	5.4	6.0(67.)	1130.
2	360.	38.	452.	10.	10.	0.	-2.	-4.	-	2.6	2.9(68.)	2590.
3	500.	30.	530.	9.	14.	0.	-11.	-13.	-	2.1	2.2(70.)	3280.
4	558.	35.	596.	10.	10.	0.	-10.	-12.	-	2.1	2.2(70.)	3280.
5	700.	57.	825.	25.	25.	0.	3.	1.	-	3.8	3.9(72.)	1860.
6	863.	56.	970.	15.	15.	0.	-21.	-23.	-	1.4	1.4(74.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
266	NWNESE 33 2S 3W	1086	950	1.87	372.	4814.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	540.	30.	570.	30.	18.	0.	-6.	-7.	-	2.5	2.6(71.)	2730.
2	690.	55.	750.	45.	30.	0.	10.	9.	-	5.3	5.4(73.)	1350.
3	850.	15.	865.	17.	17.	0.	-9.	-10.	-	2.1	2.0(75.)	3280.
4	925.	21.	950.	10.	16.	0.	-20.	-21.	-	1.4	1.3(76.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
267	NWNESE 34 2S 3W	999	353	1.35	136.	4432.	1.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	294.	21.	315.	15.	15.	0.	-5.	3.	-	2.5	2.8(67.)	2730.
2	350.	40.	435.	35.	25.	0.	4.	12.	-	3.8	4.2(67.)	1860.
3	460.	14.	475.	15.	15.	0.	-5.	2.	-	2.5	2.7(66.)	2730.
4	480.	20.	500.	26.	17.	0.	-10.	-3.	-	1.7	1.8(68.)	3920.
5	530.	40.	590.	50.	24.	0.	12.	20.	-	5.5	5.9(69.)	1300.
6	690.	22.	712.	35.	25.	0.	6.	14.	-	4.0	4.2(71.)	1780.
7	740.	30.	770.	45.	22.	0.	1.	9.	-	3.2	3.4(71.)	2180.
8	800.	20.	820.	15.	15.	0.	-14.	-7.	-	1.5	1.6(72.)	4400.
9	832.	32.	864.	12.	15.	0.	-18.	-10.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
268	NWNESW 34 2S 3W	1054	650	1.35	213.	4399.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	410.	38.	505.	16.	16.	0.	-4.	3.	-	2.5	2.7(69.)	2730.
2	573.	80.	700.	35.	23.	0.	8.	15.	-	4.6	4.8(71.)	1540.
3	730.	35.	776.	20.	17.	0.	5.	12.	-	3.8	3.8(73.)	1860.
4	826.	14.	840.	18.	20.	0.	-5.	2.	-	2.5	2.5(74.)	2730.
5	858.	36.	894.	35.	30.	0.	8.	15.	-	4.6	4.6(75.)	1540.
6	922.	18.	940.	15.	15.	0.	-16.	-9.	-	1.5	1.5(76.)	4400.
7	1030.	10.	1040.	9.	14.	0.	-21.	-15.	-	1.1	1.1(77.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
269	SWNENE 34 2S 3W	992	652	1.57	95.	4717.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	55.	330.	35.	35.	0.	5.	9.	-	4.0	4.5(66.)	1780.
2	400.	20.	420.	40.	21.	0.	10.	14.	-	5.3	5.8(68.)	1350.
3	468.	17.	485.	25.	25.	0.	12.	15.	-	5.5	5.9(69.)	1300.
4	490.	130.	650.	45.	30.	0.	15.	19.	-	7.2	7.7(69.)	1010.
5	675.	20.	695.	12.	15.	0.	-10.	-5.	-	2.1	2.1(72.)	3280.
6	720.	43.	800.	11.	15.	0.	-12.	-8.	-	1.7	1.8(72.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
270	NESENW 34 2S 3W	1029	350	1.75	100.	3992.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	30.	470.	35.	35.	0.	-3.	-2.	-	2.6	3.0(65.)	2590.
2	493.	20.	533.	30.	22.	0.	8.	9.	-	4.9	5.3(69.)	1460.
3	590.	47.	658.	50.	25.	0.	14.	15.	-	7.2	7.6(70.)	1010.
4	698.	14.	712.	20.	20.	0.	-5.	-4.	-	2.5	2.6(71.)	2730.
5	752.	50.	820.	50.	25.	0.	12.	13.	-	5.5	5.9(72.)	1300.
6	850.	43.	913.	10.	14.	0.	-21.	-20.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
271	SWNWNE 35 2S 3W	948	753	1.93	93.	4594.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	30.	290.	45.	25.	0.	10.	8.	-	5.5	6.1(67.)	1300.
2	350.	18.	368.	11.	22.	0.	8.	6.	-	4.9	5.4(68.)	1460.
3	388.	32.	420.	60.	26.	0.	18.	16.	-	10.0	10.9(68.)	750.
4	450.	40.	490.	50.	23.	0.	20.	19.	-	13.0	14.0(69.)	585.
5	510.	75.	612.	60.	26.	0.	15.	13.	-	7.7	8.2(70.)	960.
6	640.	20.	690.	20.	14.	0.	-7.	-9.	-	2.1	2.1(71.)	3280.
7	740.	23.	763.	10.	13.	0.	-19.	-21.	-	1.5	1.5(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
272	NENWNW 35 2S 3W	992	353	1.11	92.	4274.	1.74

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	28.	225.	25.	25.	0.	-4.	8.	-	2.8	3.1(66.)	2200.
2	290.	20.	350.	25.	25.	0.	1.	13.	-	2.6	2.9(69.)	2590.
3	385.	30.	436.	40.	20.	0.	16.	28.	-	6.7	7.1(70.)	1090.
4	483.	50.	468.	40.	20.	0.	14.	26.	-	5.5	5.7(72.)	1300.
5	612.	20.	632.	25.	20.	0.	10.	22.	-	4.6	4.6(74.)	1540.
6	685.	15.	700.	12.	12.	0.	-12.	-1.	-	1.5	1.5(75.)	4400.
7	750.	30.	780.	10.	15.	0.	-20.	-8.	-	1.4	1.3(77.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
273	NWNESW 35 2S 3W	976	652	1.22	130.	4816.	0.97

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	387.	50.	460.	45.	24.	0.	8.	18.	-	4.0	4.4(67.)	1780.
2	489.	100.	640.	50.	25.	0.	14.	24.	-	5.5	6.0(68.)	1300.
3	655.	12.	668.	21.	17.	0.	-8.	1.	-	2.1	2.2(70.)	3280.
4	704.	25.	735.	15.	15.	0.	-13.	-3.	-	1.5	1.6(70.)	4400.
5	757.	18.	775.	10.	15.	0.	-22.	-12.	-	1.1	1.2(71.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
274	SENESE 36 2S 3W	1014	855	1.70	122.	5311.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	215.	21.	236.	45.	23.	0.	-5.	-4.	-	2.5	2.8(66.)	2730.
2	385.	48.	510.	40.	35.	0.	1.	3.	-	3.2	3.5(68.)	2180.
3	530.	88.	680.	45.	25.	0.	10.	12.	-	5.3	5.7(69.)	1350.
4	710.	30.	740.	40.	21.	0.	-6.	-4.	-	2.5	2.5(71.)	2730.
5	760.	40.	805.	25.	25.	0.	-10.	-9.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
275	NENENW 36 2S 3W	1025	451	1.31	202.	5002.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	75.	485.	25.	20.	0.	-6.	2.	-	2.1	2.3(67.)	3280.

2	500.	20.	520.	20.	17.	0.	-3.	11.	-	3.2	3.4(70.)	2180.
3	560.	22.	582.	13.	13.	0.	-5.	5.	-	2.8	2.8(70.)	2590.
4	620.	24.	644.	35.	17.	0.	5.	13.	-	3.8	3.9(71.)	1860.
5	698.	32.	730.	45.	20.	0.	7.	15.	-	4.0	4.1(72.)	1780.
6	798.	35.	860.	36.	20.	0.	-3.	5.	-	2.6	2.7(73.)	2590.
7	870.	30.	900.	36.	25.	0.	-5.	3.	-	2.5	2.5(74.)	2730.
8	902.	45.	947.	30.	30.	0.	-16.	-8.	-	1.5	1.5(75.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
276	NESENE 36 2S 3W	969	255	1.24	106.	4894.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	42.	285.	50.	25.	0.	-3.	5.	-	4.4	5.0(66.)	1400.
2	310.	30.	340.	45.	30.	0.	15.	25.	-	6.7	7.4(67.)	1090.
3	390.	26.	430.	35.	20.	0.	10.	19.	-	4.9	5.4(68.)	1460.
4	500.	30.	530.	50.	22.	0.	18.	28.	-	8.2	8.8(69.)	900.
5	565.	20.	585.	26.	15.	0.	5.	15.	-	3.8	4.0(70.)	1860.
6	608.	17.	625.	30.	30.	0.	9.	19.	-	4.6	4.9(70.)	1540.
7	670.	20.	690.	25.	25.	0.	5.	15.	-	3.8	3.9(71.)	1860.
8	742.	48.	790.	35.	15.	0.	-14.	-5.	-	1.5	1.6(72.)	4400.
9	800.	15.	815.	50.	32.	0.	-20.	-13.	-	1.1	1.2(72.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
277	NWNW 36 3S 3E	767	171	2.37	58.	11198.	0.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	20.	140.	35.	30.	0.	-7.	-12.	-	2.6	3.0(65.)	2590.
2	266.	18.	284.	100.	55.	0.	-18.	-25.	-	1.5	1.7(66.)	4400.
3	345.	8.	354.	25.	22.	0.	-18.	-23.	-	1.5	1.7(67.)	4400.
4	490.	44.	534.	100.	60.	0.	10.	5.	-	6.7	7.3(68.)	1090.
5	576.	20.	596.	75.	55.	0.	1.	-4.	-	4.0	4.3(69.)	1780.
6	725.	50.	798.	60.	55.	0.	-2.	-7.	-	3.2	3.4(70.)	2180.
7	834.	14.	850.	50.	50.	0.	-15.	-21.	-	1.7	1.8(71.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
278	NWNW 7 3S 2E	908	545	2.63	24.	8579.	0.83

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	106.	26.	50.	50.	0.	-13.	-19.	-	2.1	2.4(64.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
279	NWNWNW 8 3S 2E	943	1066	1.90	252.	4092.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	384.	50.	436.	45.	45.	0.	-10.	-11.	21.2	2.1	2.2(68.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

280		SWNESE 9 3S 2E		894	660	0.91		100.	12889.		0.90		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	155.	38.	193.	90.	23.	0.	16.	32.	-	5.5	5.3(65.)		1300.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)				
281		SWSWSW 29 3S 1E		811	861	2.29	90.	2107.		1.73			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	80.	25.	134.	50.	50.	0.	1.	-4.	-	3.8	4.3(65.)		1860.
2	154.	10.	164.	65.	150.	0.	2.	-2.	-	4.0	4.5(66.)		1780.
3	186.	34.	220.	80.	80.	0.	1.	-4.	-	3.8	4.2(67.)		1860.
4	235.	58.	294.	45.	45.	0.	5.	0.	-	4.6	5.1(68.)		1540.
5	318.	10.	328.	45.	32.	0.	10.	7.	-	7.2	7.8(69.)		1010.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)				
282		SWNWSW 29 3S 1E		807	1261	1.08	100.	1637.		1.80			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	140.	34.	174.	105.	100.	0.	11.	24.	-	4.9	5.5(66.)		1460.
2	204.	40.	244.	105.	40.	0.	13.	26.	-	5.5	6.1(67.)		1300.
3	270.	10.	280.	80.	55.	0.	14.	31.	-	8.2	8.9(68.)		900.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)				
283		SENWSWSE 5 3S 1W		884	759	3.33	100.	1518.		2.08			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	128.	12.	172.	50.	50.	0.	1.	-5.	-	6.7	7.5(66.)		1090.
2	200.	60.	310.	75.	75.	0.	-10.	-15.	-	3.8	4.1(68.)		1860.
3	315.	94.	552.	75.	75.	0.	-10.	-16.	-	3.8	4.0(70.)		1860.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)				
284		NENWNE 6 3S 1W		892	355	2.08	80.	1992.		1.63			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	100.	90.	280.	50.	50.	0.	7.	4.	-	4.9	3.6(65.)		1460.
2	300.	60.	390.	50.	50.	0.	11.	9.	-	5.5	6.0(68.)		1300.
3	407.	35.	445.	20.	30.	0.	3.	-0.	-	4.0	4.3(70.)		1780.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)				
285		NESWNW 6 3S 1W		895	755	1.80	61.	3501.		1.21			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS

1	164.	70.	322.	100.	40.	0.	13.	13.	-	6.7	7.6(65.)	1090.
2	380.	170.	622.	110.	40.	0.	2.	3.	-	3.2	3.5(68.)	2180.
3	700.	10.	710.	20.	20.	0.	-5.	-5.	-	2.5	2.6(72.)	2730.
4	736.	10.	746.	25.	15.	0.	-18.	-20.	-	1.4	1.4(72.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
286	NWSESE 6 3S 1W	853	655	2.32	75.	1030.	2.86

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	65.	415.	50.	50.	0.	10.	5.	-	5.5	5.7(72.)	1300.
2	460.	180.	790.	60.	60.	0.	5.	0.	-	4.6	4.5(77.)	1540.
3	760.	35.	810.	35.	35.	0.	-8.	-13.	-	2.5	2.2(85.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
287	NENESE 8 3S 1W	0	755	2.15	80.	1511.	1.82

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	25.	170.	40.	40.	0.	4.	0.	-	4.0	4.5(65.)	1780.
2	230.	75.	410.	50.	43.	0.	10.	5.	-	5.5	6.0(68.)	1300.
3	450.	150.	720.	60.	60.	0.	-10.	-14.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
288	SENWNW 8 3S 1W	0	974	1.47	67.	4995.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	70.	30.	160.	45.	35.	0.	10.	15.	-	5.3	6.1(64.)	1350.
2	215.	80.	470.	40.	22.	0.	18.	23.	-	8.8	9.3(66.)	850.
3	520.	195.	840.	50.	30.	0.	8.	13.	-	4.6	4.9(69.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
289	NWNWNE 8 3S 1W	871	861	1.46	22.	2105.	1.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	24.	144.	25.	32.	0.	20.	26.	-	10.8	12.3(65.)	680.
2	200.	54.	266.	35.	40.	0.	23.	29.	-	17.0	19.1(66.)	458.
3	348.	148.	582.	30.	40.	0.	20.	26.	-	10.8	11.8(68.)	680.
4	672.	16.	690.	20.	25.	0.	12.	18.	-	5.5	5.7(72.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
290	SENENE 15 3S 1W	870	763	2.03	50.	3000.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	82.	26.	108.	55.	55.	0.	-8.	-11.	-	2.1	2.4(64.)	3280.
2	134.	30.	164.	55.	55.	0.	10.	7.	-	5.5	6.3(65.)	1300.
3	200.	12.	212.	35.	35.	0.	1.	-2.	-	3.2	3.6(66.)	2180.

4	220.	44.	304.	70.	70.	0.	10.	7.	-	5.5	6.2(66.)	1300.
5	348.	58.	406.	50.	50.	0.	5.	2.	-	4.0	4.4(67.)	1780.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
291	SWSWSW 23 3S 1W	A19	1161	1.12	90.	3528.	0.92

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	115.	50.	195.	45.	35.	0.	3.	15.	-	3.2	3.7(65.)	2180.
2	220.	10.	230.	50.	30.	0.	10.	24.	-	5.3	6.0(66.)	1350.
3	390.	118.	810.	45.	35.	0.	22.	34.	-	11.8	13.1(67.)	605.
4	835.	60.	915.	30.	25.	0.	2.	14.	-	3.2	3.4(71.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
292	SESESE 1 3S 2W	857	161	2.02	68.	3010.	0.81

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	50.	190.	40.	40.	0.	10.	7.	-	5.5	6.3(65.)	1300.
2	210.	55.	330.	50.	50.	0.	19.	16.	-	11.8	13.4(65.)	605.
3	490.	65.	630.	35.	35.	0.	22.	19.	-	19.0	20.9(67.)	407.
4	710.	140.	1050.	45.	45.	0.	12.	9.	-	6.7	7.2(69.)	1090.
5	1090.	14.	1104.	10.	15.	0.	-18.	-21.	-	1.5	1.5(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
293	SESENW 1 3S 2W	0	669	1.78	220.	2914.	1.42

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	45.	320.	50.	50.	0.	9.	9.	-	4.9	5.5(67.)	1460.
2	415.	50.	570.	60.	52.	0.	13.	13.	-	6.7	7.2(69.)	1090.
3	605.	40.	690.	45.	45.	0.	-7.	-7.	-	2.1	2.1(72.)	3280.
4	720.	125.	1000.	55.	50.	0.	-10.	-10.	-	2.1	2.1(74.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
294	SWNE 2 3S 2W	879	563	2.69	100.	2028.	1.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	67.	230.	60.	60.	0.	-15.	-21.	-	2.1	2.3(65.)	3280.
2	310.	40.	350.	65.	70.	0.	-10.	-15.	-	2.6	2.9(68.)	2590.
3	410.	45.	505.	55.	55.	0.	3.	-3.	-	4.9	5.3(69.)	1460.
4	620.	50.	770.	50.	50.	0.	5.	-1.	-	5.5	5.7(72.)	1300.
5	755.	53.	885.	45.	45.	0.	-5.	-11.	-	3.2	3.2(74.)	2180.
6	930.	160.	1150.	75.	70.	0.	-14.	-20.	-	2.1	2.0(76.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
295	NWNWNW 3 3S 2W	0	354	0.69	280.	8536.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	315.	150.	610.	55.	20.	0.	22.	41.	-	5.5	6.1(67.)	1300.
2	680.	105.	908.	45.	20.	0.	30.	30.	-	5.2	5.4(71.)	2180.
3	970.	120.	1120.	50.	25.	0.	40.	40.	-	5.5	5.5(75.)	1300.
4	1140.	140.	1410.	50.	15.	0.	30.	30.	-	5.2	5.1(77.)	2180.
5	1450.	10.	1460.	13.	10.	0.	18.	40.	-	5.3	5.0(80.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
296	NESWNW 4 3S 2W	859	862	1.81	103.	2524.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	80.	265.	100.	45.	0.	15.	15.	-	7.7	8.8(65.)	960.
2	400.	10.	465.	25.	25.	0.	9.	10.	-	5.3	5.8(68.)	1350.
3	530.	130.	770.	100.	50.	0.	30.	30.	-	FRESH	FRESH	FRESH
4	790.	60.	872.	75.	50.	0.	21.	21.	-	13.0	13.3(73.)	580.
5	908.	20.	1004.	30.	25.	0.	12.	12.	-	5.5	5.5(75.)	1300.
6	1080.	15.	1095.	10.	13.	0.	-19.	-19.	-	1.5	1.5(77.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
297	NWSENW 5 3S 2W	0	154	1.46	80.	3432.	0.77

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	22.	260.	15.	15.	0.	2.	8.	-	3.2	3.7(64.)	2180.
2	305.	80.	530.	50.	25.	0.	20.	25.	-	10.8	12.2(66.)	680.
3	660.	10.	670.	15.	17.	0.	10.	17.	-	5.3	5.7(69.)	1350.
4	720.	40.	760.	10.	14.	0.	-20.	-15.	-	1.4	1.5(69.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
298	SWSESE 5 3S 2W	949	769	2.24	224.	2701.	1.54

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	250.	70.	350.	5.	25.	0.	9.	4.	-	5.5	6.1(67.)	1300.
2	445.	125.	670.	7.	32.	0.	20.	15.	-	17.0	18.0(70.)	458.
3	720.	40.	760.	6.	25.	0.	9.	5.	-	5.5	5.5(75.)	1300.
4	760.	15.	775.	3.	14.	0.	-11.	-16.	-	2.1	2.0(75.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
299	SENESW 5 3S 2W	972	1253	1.46	95.	4450.	0.91

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	20.	180.	15.	15.	0.	-2.	4.	-	2.6	3.0(65.)	2590.
2	295.	45.	520.	45.	22.	0.	20.	25.	-	10.8	12.1(66.)	680.
3	573.	18.	591.	20.	20.	0.	18.	24.	-	8.8	9.5(69.)	850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
300	NENENE 6 3S 2W	0	355	1.91	98.	4200.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	53.	200.	50.	35.	0.	-6.	-7.	-	2.5	2.9(65.)	2730.
2	300.	142.	626.	70.	25.	0.	16.	15.	-	8.2	9.1(67.)	900.
3	690.	25.	715.	30.	30.	0.	-10.	-11.	-	2.1	2.1(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
301	NESESE 6 3S 2W	998	252	1.11	94.	5227.	1.37

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	205.	32.	305.	30.	22.	0.	-7.	5.	-	2.1	2.3(66.)	3280.
2	510.	83.	660.	40.	25.	0.	10.	22.	-	4.6	4.9(70.)	1540.
3	675.	35.	740.	15.	15.	0.	-18.	-6.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
302	NENENW 6 3S 2W	994	855	2.36	94.	4703.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	20.	220.	25.	25.	0.	-5.	-10.	-	2.6	3.0(66.)	2590.
2	470.	80.	550.	100.	50.	0.	20.	15.	-	19.0	20.5(69.)	407.
3	565.	68.	632.	75.	40.	0.	10.	5.	-	6.7	7.1(70.)	1090.
4	675.	18.	693.	40.	25.	0.	-13.	-19.	-	2.1	2.2(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
303	SENW 8 3S 2W	0	269	1.97	225.	2540.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	340.	55.	557.	25.	25.	0.	20.	18.	-	13.0	14.3(68.)	585.
2	700.	12.	732.	11.	15.	0.	-12.	-15.	-	1.7	1.8(72.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
304	NENWNW 8 3S 2W	945	852	1.66	200.	4717.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	450.	70.	565.	45.	20.	0.	12.	14.	-	5.5	6.0(69.)	1300.
2	600.	40.	640.	50.	20.	0.	20.	22.	-	11.8	12.5(70.)	605.
3	700.	18.	718.	8.	12.	0.	-23.	-21.	-	1.1	1.2(72.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
305	SWNWNE 8 3S 2W	975	456	1.66	95.	4908.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	10.	260.	40.	22.	0.	15.	20.	-	8.8	9.9(66.)	850.
2	420.	83.	620.	60.	25.	0.	30.	30.	-	FRESH	FRESH	FRESH

3	640.	20.	680.	15.	15.	0.	-10.	-8.	-	2.1	2.2(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
306	SENESW 8 3S 2W	0	1052	1.54	196.	6985.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	255.	42.	320.	40.	15.	0.	3.	7.	-	3.8	4.2(66.)	1860.
2	480.	55.	590.	40.	20.	0.	10.	14.	-	5.3	5.7(69.)	1350.
3	630.	21.	690.	25.	15.	0.	-21.	-17.	-	1.4	1.4(71.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
307	NENWSE 8 3S 2W	923	855	1.78	95.	4935.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	20.	170.	15.	15.	0.	-2.	-2.	-	2.6	3.0(65.)	2590.
2	300.	115.	520.	60.	40.	0.	20.	20.	-	11.8	13.1(67.)	605.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
308	SWNWSW 9 3S 2W	0	652	2.01	194.	4088.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	18.	340.	25.	25.	0.	2.	-0.	-	3.8	4.2(67.)	1860.
2	425.	85.	585.	45.	23.	0.	10.	7.	-	5.5	5.0(68.)	1300.
3	655.	25.	690.	20.	15.	0.	-12.	-15.	-	1.7	1.8(71.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
309	NWNWNE 9 3S 2W	905	771	2.15	221.	2506.	1.46

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	30.	505.	30.	30.	0.	1.	-3.	-	3.8	4.2(67.)	1860.
2	530.	110.	890.	45.	40.	0.	13.	9.	-	7.2	7.5(71.)	1010.
3	870.	10.	895.	35.	35.	0.	8.	5.	-	5.5	5.4(76.)	1300.
4	950.	33.	1020.	20.	20.	0.	-9.	-13.	-	2.1	2.0(77.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
310	SWSWSW 15 3S 2W	976	255	1.67	311.	7012.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	400.	12.	412.	22.	25.	0.	8.	11.	-	4.9	5.4(68.)	1460.
2	590.	30.	740.	40.	30.	0.	20.	22.	-	11.8	12.7(69.)	605.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
311	SWNWNW 16 3S 2W	0	1252	1.51	98.	4469.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	29.	215.	40.	30.	0.	-2.	3.	-	2.6	3.0(65.)	2590.
2	315.	60.	435.	60.	35.	0.	20.	25.	-	10.8	11.9(67.)	680.
3	535.	20.	564.	20.	20.	0.	-10.	-5.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
312	NENESW 16 3S 2W	457	354	2.05	157.	5752.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	15.	255.	20.	20.	0.	-2.	-5.	-	2.6	3.0(66.)	2590.
2	405.	84.	550.	45.	25.	0.	13.	10.	-	7.2	7.9(68.)	1010.
3	600.	25.	640.	25.	20.	0.	-14.	-17.	-	1.7	1.8(70.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
313	NWSWNE 16 3S 2W	964	454	1.57	225.	5430.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	320.	43.	480.	45.	25.	0.	10.	14.	-	5.3	5.9(67.)	1350.
2	530.	25.	590.	40.	15.	0.	17.	21.	-	8.2	8.8(69.)	900.
3	655.	10.	665.	20.	13.	0.	3.	7.	-	3.8	4.0(71.)	1860.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
314	SWNWSE 16 3S 2W	0	1054	1.77	178.	6041.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	410.	60.	530.	25.	25.	0.	19.	19.	-	10.8	11.8(68.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
315	SWSWSW 17 3S 2W	0	1154	0.86	61.	1106.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	25.	215.	75.	80.	0.	-10.	5.	-	1.5	1.7(66.)	4400.
2	290.	40.	330.	30.	40.	0.	-17.	-1.	-	1.1	1.3(68.)	5700.
3	350.	50.	535.	45.	45.	0.	-10.	5.	-	1.5	1.6(68.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
316	NENESE 17 3S 2W	0	454	2.44	151.	3494.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	215.	25.	315.	20.	20.	0.	-6.	-11.	-	2.6	3.0(66.)	2590.
2	475.	45.	530.	50.	25.	0.	13.	8.	-	8.8	9.4(70.)	850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
317	NWNENE 17 3S 2W	0	452	1.76	96.	4502.	1.28

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	85.	240.	40.	25.	0.	-2.	-1.	-	2.6	3.0(65.)	2590.
2	310.	72.	490.	40.	35.	0.	17.	18.	-	8.8	9.7(67.)	850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
318	NESESE 21 3S 2W	0	756	2.24	196.	7088.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	55.	402.	40.	25.	0.	-3.	-7.	-	2.6	3.0(66.)	2590.
2	430.	25.	455.	50.	33.	0.	10.	6.	-	5.5	6.0(68.)	1300.
3	502.	13.	515.	27.	20.	0.	6.	2.	-	4.9	5.3(69.)	1460.
4	550.	20.	570.	35.	35.	0.	-10.	-15.	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
319	NESENW 21 3S 2W	0	756	2.25	168.	5353.	1.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	40.	330.	35.	25.	0.	-2.	-7.	-	3.2	3.6(67.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
320	SENWNE 21 3S 2W	0	246	2.25	300.	3722.	1.28

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	40.	430.	90.	45.	0.	15.	11.	-	8.8	9.6(68.)	850.
2	450.	95.	545.	45.	25.	0.	13.	8.	-	7.7	8.3(69.)	960.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
321	NWNESENW 21 3S 2W	0	1048	1.46	50.	977.	2.51

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	15.	233.	50.	50.	0.	-3.	2.	-	2.6	3.0(66.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
322	NWNWNE 22 3S 2W	972	761	1.25	206.	4550.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	295.	37.	475.	20.	20.	0.	3.	12.	-	3.2	3.6(67.)	2180.
2	530.	145.	910.	30.	30.	0.	30.	30.	-	10.8	11.6(69.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
323	NWSWSWNW 22 3S 2W	0	347	1.65	100.	984.	2.49

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	50.	305.	35.	35.	0.	-18.	-16.	-	1.5	1.6(69.)	4400.
2	390.	95.	430.	35.	35.	0.	10.	12.	-	5.3	5.4(73.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
324	SWNESW 22 3S 2W	1022	255	1.67	156.	6151.	0.84

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	30.	345.	32.	32.	0.	-2.	0.	-	2.6	3.0(65.)	2590.
2	510.	65.	600.	50.	25.	0.	13.	15.	-	6.7	7.3(68.)	1090.
3	700.	20.	720.	25.	17.	0.	-17.	-15.	-	1.5	1.6(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
325	NWNWSW 26 3S 2W	0	1072	1.70	203.	6803.	1.04

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	570.	53.	715.	30.	20.	0.	13.	15.	-	6.7	7.2(69.)	1090.
2	760.	18.	845.	15.	10.	0.	-10.	-8.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
326	NESE 27 3S 2W	0	872	2.15	185.	6500.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	330.	130.	600.	50.	40.	0.	7.	3.	-	4.9	5.4(67.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
327	SENWSWNW 27 3S 2W	1008	954	1.74	90.	982.	1.68

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	25.	330.	30.	30.	0.	-1.	-0.	-	2.6	2.9(67.)	2590.
2	370.	52.	470.	50.	50.	0.	23.	24.	-	19.0	20.3(70.)	407.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
328	SWNENE 28 3S 2W	1003	1249	1.56	100.	956.	1.71

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	125.	510.	50.	50.	0.	-20.	-16.	-	1.4	1.5(68.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
329	NWSENWSE 34 3S 2W	918	349	2.78	100.	1029.	2.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	255.	15.	270.	13.	35.	0.	-27.	-33.	-	1.4	1.5(69.)	4850.
2	370.	75.	620.	20.	45.	0.	-18.	-24.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
330	NENENENW 34 3S 2W	948	954	1.70	100.	1505.	1.50

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	270.	20.	290.	75.	45.	0.	9.	11.	-	5.3	5.8(68.)	1350.
2	350.	45.	450.	50.	35.	0.	20.	22.	-	11.8	12.8(69.)	605.
3	460.	20.	480.	25.	33.	0.	30.	30.	-	FRESH	FRESH	FRESH
4	500.	20.	540.	25.	25.	0.	19.	21.	-	10.8	11.4(71.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
331	SENENENE 34 3S 2W	991	749	1.78	78.	1101.	2.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	35.	240.	25.	35.	0.	-18.	-18.	-	1.5	1.7(65.)	4400.
2	255.	35.	345.	80.	80.	0.	-8.	-8.	-	2.1	2.2(69.)	3280.
3	370.	110.	555.	35.	35.	0.	10.	10.	-	5.3	5.5(72.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
332	SWNE 35 3S 2W	1004	1072	1.93	136.	5779.	1.44

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	30.	340.	35.	30.	0.	-1.	-3.	-	3.2	3.6(67.)	2180.
2	403.	30.	492.	30.	25.	0.	7.	5.	-	4.6	4.9(69.)	1540.
3	540.	50.	640.	45.	25.	0.	15.	13.	-	7.7	8.1(71.)	960.
4	715.	30.	742.	30.	22.	0.	8.	6.	-	4.9	5.0(74.)	1460.
5	823.	20.	867.	20.	20.	0.	-18.	-20.	-	1.5	1.5(75.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
333	NENWSE 35 3S 2W	0	563	1.47	150.	3595.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	225.	10.	235.	25.	20.	0.	3.	9.	-	3.8	4.2(66.)	1860.
2	290.	55.	410.	35.	25.	0.	20.	25.	-	10.8	12.0(67.)	680.
3	480.	10.	490.	8.	10.	0.	-16.	-11.	-	1.5	1.5(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
334	NWNW 35 3S 2W	1018	772	1.38	171.	5555.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	265.	15.	280.	35.	25.	0.	-2.	5.	-	2.6	3.0(66.)	2590.
2	370.	40.	460.	45.	40.	0.	14.	21.	-	6.7	7.4(67.)	1090.
3	505.	70.	580.	45.	25.	0.	19.	26.	-	10.0	10.8(69.)	750.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
335	NESW 35 3S 2W	0	672	2.03	147.	5902.	1.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	265.	15.	280.	25.	25.	0.	-3.	-5.	-	2.6	3.0(66.)	2590.
2	380.	30.	465.	35.	35.	0.	15.	12.	-	8.2	9.0(68.)	900.
3	510.	60.	580.	40.	35.	0.	30.	30.	-	FRESH	FRESH	FRESH
4	598.	10.	608.	15.	15.	0.	15.	13.	-	8.2	8.7(70.)	900.
5	680.	23.	715.	15.	15.	0.	-2.	-5.	-	2.6	2.8(71.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
336	SESWSE 36 3S 2W	918	563	1.41	63.	2510.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	40.	180.	20.	15.	0.	-3.	3.	-	2.6	3.0(65.)	2590.
2	210.	50.	320.	20.	17.	0.	7.	15.	-	4.0	4.5(66.)	1780.
3	390.	42.	480.	40.	20.	0.	15.	22.	-	7.2	7.8(68.)	1010.
4	510.	92.	635.	60.	30.	0.	20.	26.	-	10.8	11.5(70.)	680.
5	715.	35.	750.	40.	24.	0.	10.	16.	-	4.9	5.1(72.)	1460.
6	800.	10.	810.	10.	10.	0.	-21.	-16.	-	1.1	1.2(74.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
337	NWSESE 2 3S 3W	1041	156	1.93	340.	5803.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	398.	18.	416.	15.	25.	0.	-3.	-5.	-	2.6	2.9(68.)	2590.
2	440.	20.	460.	15.	25.	0.	-3.	-5.	-	2.6	2.9(68.)	2590.
3	600.	30.	630.	25.	22.	0.	17.	15.	-	8.8	9.4(70.)	850.
4	720.	55.	775.	15.	15.	0.	1.	-1.	-	3.2	3.4(71.)	2180.
5	900.	75.	975.	13.	16.	0.	-20.	-22.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
338	NENWNE 2 3S 3W	0	1175	1.63	122.	4351.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	15.	175.	35.	35.	0.	5.	8.	-	4.0	4.5(65.)	1780.
2	432.	30.	462.	48.	25.	0.	10.	13.	-	5.3	5.7(69.)	1350.
3	483.	20.	503.	30.	27.	0.	13.	16.	-	6.7	7.2(69.)	1090.
4	570.	20.	590.	45.	25.	0.	17.	20.	-	8.8	9.3(70.)	850.
5	710.	10.	720.	40.	40.	0.	3.	5.	-	3.8	3.9(72.)	1860.
6	790.	20.	810.	17.	17.	0.	-17.	-15.	-	1.5	1.5(73.)	4400.
7	830.	26.	856.	11.	15.	0.	-21.	-18.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
339	NESWNE 2 3S 3W	1010	156	0.98	169.	5678.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	10.	300.	25.	30.	0.	-1.	13.	-	2.5	2.8(67.)	2730.
2	318.	60.	378.	20.	17.	0.	-2.	12.	-	2.5	2.7(68.)	2730.
3	393.	44.	437.	23.	27.	0.	-3.	11.	-	2.1	2.2(69.)	3280.
4	520.	55.	575.	40.	30.	0.	18.	32.	-	6.7	7.1(70.)	1090.
5	583.	53.	636.	25.	25.	0.	17.	31.	-	6.7	7.0(71.)	1090.
6	820.	110.	930.	10.	22.	0.	-30.	-16.	-	0.8	0.8(74.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
340	SWNWSW 2 3S 3W	1067	352	0.69	224.	5718.	1.37

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	45.	325.	55.	25.	0.	10.	29.	-	8.8	9.7(67.)	700.
2	500.	18.	518.	17.	10.	0.	17.	37.	-	4.6	4.9(70.)	1540.
3	550.	30.	580.	15.	12.	0.	20.	39.	-	5.3	5.6(71.)	1350.
4	605.	60.	665.	18.	10.	0.	19.	38.	-	4.9	5.1(72.)	1460.
5	710.	100.	810.	25.	13.	0.	37.	37.	-	4.6	4.7(73.)	1540.
6	880.	46.	926.	30.	17.	0.	33.	33.	-	3.8	3.7(76.)	1860.
7	1010.	45.	1055.	18.	12.	0.	20.	39.	-	5.3	5.2(77.)	1350.
8	1215.	15.	1230.	5.	5.	0.	-30.	-12.	-	0.7	0.6(80.)	9400.
9	1293.	45.	1338.	2.	5.	0.	-38.	-19.	-	0.5	0.5(81.)	12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
341	NESESE 9 3S 3W	1016	654	1.27	672.	9962.	0.89

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	690.	20.	710.	12.	12.	0.	-20.	-11.	-	1.4	1.4(70.)	4850.
2	753.	11.	764.	8.	10.	0.	-8.	1.	-	2.1	2.2(70.)	3280.
3	890.	30.	920.	17.	15.	0.	10.	19.	-	4.9	5.1(71.)	1460.
4	1140.	75.	1215.	15.	15.	0.	-23.	-14.	-	1.1	1.2(74.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
342	NENENE 10 3S 3W	1035	151	2.07	232.	7942.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	310.	30.	340.	25.	20.	0.	7.	4.	-	FRESH	FRESH	FRESH
2	600.	65.	665.	25.	21.	0.	23.	20.	-	22.0	23.0(71.)	357.
3	758.	144.	902.	35.	20.	0.	27.	27.	-	FRESH	FRESH	FRESH
4	1065.	12.	1077.	13.	13.	0.	-5.	-9.	-	2.6	2.6(78.)	2590.
5	1140.	46.	1186.	13.	13.	0.	-23.	-26.	-	1.4	1.3(79.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
343	SWSWNW 12 3S 3W	1016	753	1.59	328.	7130.	0.99

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	48.	418.	25.	25.	0.	-1.	2.	-	2.6	2.9(67.)	2590.
2	440.	75.	515.	30.	20.	0.	10.	13.	-	5.3	5.8(68.)	1350.
3	602.	50.	652.	30.	18.	0.	20.	23.	-	11.8	12.7(69.)	605.
4	808.	27.	835.	15.	15.	0.	-3.	0.	-	2.6	2.8(71.)	2590.
5	928.	62.	990.	15.	17.	0.	-20.	-17.	-	1.4	1.4(73.)	4850.
6	1020.	30.	1050.	10.	15.	0.	-33.	-30.	-	0.8	0.8(74.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
344	SESENW 12 3S 3W	1052	157	2.20	193.	5305.	1.48

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	440.	16.	456.	25.	17.	0.	-1.	-5.	-	3.2	3.4(70.)	2180.
2	520.	80.	600.	20.	15.	0.	10.	5.	-	5.5	5.6(71.)	1300.
3	690.	17.	707.	15.	16.	0.	-2.	-5.	-	3.2	3.3(74.)	2180.
4	748.	62.	810.	23.	19.	0.	20.	16.	-	14.0	14.1(75.)	550.
5	890.	60.	950.	15.	15.	0.	-10.	-14.	-	2.1	2.0(77.)	3280.
6	982.	50.	1032.	10.	13.	0.	-33.	-37.	-	0.8	0.8(78.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
345	NWNWSE 12 3S 3W	1047	1155	1.58	370.	6198.	0.81

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	435.	45.	480.	15.	20.	0.	10.	14.	-	5.3	5.9(67.)	1350.
2	530.	10.	540.	15.	20.	0.	13.	17.	-	6.7	7.3(68.)	1090.
3	598.	30.	628.	20.	22.	0.	23.	26.	-	17.0	18.5(68.)	458.
4	730.	12.	742.	10.	15.	0.	10.	14.	-	5.3	5.7(69.)	1350.
5	827.	22.	849.	12.	16.	0.	19.	22.	-	10.0	10.6(70.)	750.
6	880.	50.	930.	12.	17.	0.	10.	13.	-	5.3	5.8(71.)	1350.
7	988.	22.	1010.	3.	7.	0.	-20.	-17.	-	1.4	1.4(72.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
346	SWSW 13 3S 3W	1036	666	0.79	508.	7497.	0.75

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	690.	120.	810.	30.	23.	0.	20.	37.	-	5.5	6.0(69.)	1300.
2	825.	65.	890.	20.	15.	0.	10.	27.	-	3.8	4.0(70.)	1860.
3	980.	30.	1010.	19.	15.	0.	-5.	12.	-	1.7	1.8(71.)	3920.
4	1020.	40.	1060.	17.	15.	0.	-7.	10.	-	1.5	1.6(71.)	4400.
5	1070.	30.	1100.	16.	14.	0.	-13.	4.	-	1.4	1.4(72.)	4850.
6	1180.	65.	1245.	8.	12.	0.	-30.	-13.	-	0.7	0.7(72.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
347	NENWNE 13 3S 3W	1020	454	1.68	362.	6513.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	560.	80.	640.	40.	22.	0.	17.	19.	-	8.8	9.5(69.)	850.
2	740.	20.	760.	15.	13.	0.	-5.	-3.	-	2.5	2.6(71.)	2730.
3	790.	20.	810.	15.	13.	0.	-10.	-8.	-	2.1	2.1(72.)	3280.
4	850.	60.	910.	17.	15.	0.	-20.	-18.	-	1.4	1.4(72.)	4850.
5	942.	25.	967.	11.	14.	0.	-27.	-25.	-	1.0	1.0(73.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
348	NESE 14 3S 3W	987	867	1.27	513.	6788.	0.71

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	650.	98.	715.	35.	35.	0.	25.	34.	-	19.0	20.7(68.)	407.
2	788.	10.	798.	25.	17.	0.	10.	20.	-	5.3	5.7(69.)	1350.
3	825.	70.	905.	22.	15.	0.	10.	19.	-	4.9	5.3(69.)	1460.
4	950.	37.	1010.	15.	15.	0.	-7.	2.	-	2.1	2.2(70.)	3280.
5	1035.	17.	1052.	13.	15.	0.	-11.	-2.	-	1.7	1.8(71.)	3920.
6	1135.	52.	1200.	9.	15.	0.	-30.	-21.	-	0.8	0.9(72.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
349	SWSE 15 3S 3W	965	175	1.47	100.	1309.	2.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	112.	38.	150.	37.	37.	0.	10.	15.	-	5.3	6.0(66.)	1350.
2	195.	8.	204.	25.	25.	0.	6.	11.	-	4.0	4.4(67.)	1780.
3	229.	26.	246.	35.	35.	0.	15.	20.	-	7.2	7.9(68.)	1010.
4	270.	24.	294.	34.	34.	0.	8.	13.	-	4.6	5.0(69.)	1540.
5	320.	6.	326.	43.	43.	0.	-10.	-5.	-	2.1	2.2(70.)	3280.
6	400.	40.	464.	5.	10.	0.	-28.	-23.	-	1.0	1.0(72.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
350	NENE 18 3S 3W	1068	478	2.43	540.	8066.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	572.	20.	592.	15.	20.	0.	-10.	-15.	-	2.5	2.7(69.)	2730.
2	770.	10.	780.	10.	15.	0.	-20.	-25.	-	1.5	1.6(71.)	4400.
3	810.	15.	825.	10.	15.	0.	-30.	-36.	-	1.0	1.0(72.)	6500.
4	898.	10.	908.	13.	19.	0.	-27.	-34.	-	1.1	1.2(73.)	5700.
5	937.	13.	950.	9.	16.	0.	-40.	-46.	-	0.7	0.7(73.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
351	SESE 20 3S 3W	1024	456	1.78	532.	8596.	0.99

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	540.	50.	590.	25.	25.	0.	1.	1.	-	3.2	3.5(69.)	2180.
2	660.	40.	730.	25.	14.	0.	-1.	-1.	-	2.6	2.8(70.)	2590.
3	780.	40.	810.	30.	25.	0.	10.	10.	-	5.3	5.6(71.)	1350.
4	849.	45.	885.	35.	25.	0.	13.	13.	-	6.7	7.0(72.)	1090.
5	912.	18.	930.	15.	17.	0.	7.	7.	-	4.6	4.7(73.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
352	NWNWSE 20 3S 3W	997	454	1.74	494.	8778.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	568.	30.	598.	25.	25.	0.	13.	14.	-	6.7	7.2(69.)	1090.
2	790.	80.	910.	30.	18.	0.	17.	18.	-	8.8	9.2(71.)	850.
3	1000.	14.	1014.	8.	8.	0.	-23.	-22.	-	1.1	1.2(74.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
353	SWSE 20 3S 3W	970	349	1.82	148.	2048.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	40.	190.	50.	50.	0.	17.	17.	-	8.8	10.0(65.)	850.
2	418.	6.	424.	20.	20.	0.	-3.	-3.	-	2.6	2.9(69.)	2590.
3	465.	8.	474.	25.	25.	0.	-3.	-3.	-	2.6	2.8(70.)	2590.
4	522.	8.	530.	25.	29.	0.	7.	7.	-	4.6	4.9(70.)	1540.
5	642.	22.	664.	30.	30.	0.	4.	4.	-	4.0	4.2(72.)	1780.
6	684.	14.	698.	22.	22.	0.	-7.	-8.	-	2.1	2.1(72.)	3280.
7	756.	14.	770.	17.	20.	0.	-7.	-8.	-	2.1	2.1(73.)	3280.
8	790.	80.	870.	40.	40.	0.	-3.	-3.	-	2.6	2.7(74.)	2590.
9	896.	12.	908.	25.	30.	0.	-7.	-8.	-	2.1	2.0(75.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
354	NENE 23 3S 3W	1026	480	1.54	645.	7218.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	760.	95.	875.	18.	18.	0.	-1.	3.	-	2.6	2.8(72.)	2590.
2	945.	20.	977.	12.	12.	0.	-7.	-3.	-	2.1	2.1(74.)	3280.
3	1010.	90.	1140.	15.	16.	0.	-23.	-19.	-	1.1	1.2(74.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
355	NENW 24 3S 3W	982	1067	1.26	512.	6820.	0.70

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	562.	30.	592.	20.	20.	0.	1.	10.	-	3.2	3.5(67.)	2180.
2	614.	116.	758.	35.	25.	0.	20.	29.	-	10.0	11.0(68.)	750.
3	890.	20.	910.	18.	15.	0.	1.	10.	-	3.2	3.4(70.)	2180.
4	960.	42.	1002.	15.	17.	0.	-10.	-1.	-	1.7	1.8(70.)	3920.
5	1045.	12.	1074.	11.	11.	0.	-17.	-9.	-	1.5	1.6(71.)	4400.
6	1120.	38.	1158.	6.	11.	0.	-37.	-28.	-	0.7	0.7(71.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
356	NWNE 24 3S 3W	993	368	1.34	512.	7051.	0.77

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	580.	130.	710.	30.	22.	0.	13.	21.	-	5.5	6.0(68.)	1300.
2	810.	12.	822.	20.	16.	0.	7.	15.	-	4.0	4.3(70.)	1780.
3	900.	72.	978.	16.	11.	0.	-10.	-2.	-	1.7	1.8(70.)	3920.
4	1018.	30.	1048.	12.	12.	0.	-20.	-12.	-	1.4	1.4(71.)	4850.
5	1098.	20.	1118.	5.	9.	0.	-40.	-32.	-	0.7	0.7(72.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
357	SESWSW 27 3S 3W	0	1177	1.47	542.	7938.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	680.	28.	708.	18.	17.	0.	-2.	3.	-	2.6	2.8(70.)	2590.
2	733.	50.	808.	17.	17.	0.	-17.	-12.	-	1.5	1.6(71.)	4400.
3	870.	75.	917.	8.	12.	0.	-33.	-28.	-	0.8	0.8(72.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
358	SWSESE 28 3S 3W	0	475	1.68	503.	7627.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	620.	18.	638.	40.	22.	0.	4.	5.	-	4.0	4.3(70.)	1780.
2	712.	48.	760.	35.	22.	0.	10.	12.	-	5.3	5.6(71.)	1350.
3	832.	13.	845.	13.	15.	0.	-17.	-16.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
359	NWSE 29 3S 3W	956	642	2.40	154.	4990.	0.73

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	83.	291.	35.	25.	0.	20.	15.	-	22.0	25.1(65.)	357.
2	330.	22.	352.	50.	40.	0.	20.	15.	-	22.0	24.7(66.)	357.
3	395.	17.	412.	25.	19.	0.	1.	-4.	-	4.0	4.5(66.)	1780.
4	430.	45.	475.	30.	19.	0.	7.	2.	-	5.5	6.1(67.)	1300.
5	530.	40.	585.	25.	17.	0.	7.	2.	-	5.5	6.1(67.)	1300.
6	595.	105.	710.	35.	23.	0.	17.	12.	-	13.0	14.2(68.)	585.
7	830.	26.	856.	7.	17.	0.	-50.	-55.	-	0.5	0.5(70.)	12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
360	NENWSW 29 3S 3W	990	650	1.70	375.	7646.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	410.	50.	512.	22.	17.	0.	7.	9.	-	4.6	5.0(69.)	1540.
2	560.	23.	618.	25.	15.	0.	7.	9.	-	4.6	4.9(71.)	1540.
3	670.	23.	693.	16.	10.	0.	-7.	-5.	-	2.1	2.1(72.)	3280.
4	810.	15.	825.	10.	10.	0.	-30.	-29.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
361	SWSWSW 29 3S 3W	976	749	1.46	259.	6679.	0.76

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	90.	350.	40.	22.	0.	13.	18.	-	5.5	6.2(65.)	1300.
2	422.	75.	550.	25.	20.	0.	17.	22.	-	8.2	9.1(67.)	900.
3	695.	35.	730.	25.	25.	0.	-7.	-2.	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
362	SESENE 21 3S 4W	0	143	1.72	147.	2550.	1.43

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	195.	45.	240.	25.	25.	0.	7.	8.	-	4.6	5.1(66.)	1540.
2	270.	55.	325.	20.	27.	0.	9.	10.	-	4.9	5.4(67.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
363	NENWNW 21 3S 4W	0	948	1.47	142.	2150.	1.60

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	30.	240.	15.	25.	0.	26.	26.	-	11.8	13.1(67.)	605.
2	275.	20.	295.	9.	20.	0.	8.	13.	-	4.6	5.0(68.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
364	NENWSE 21 3S 4W	957	156	1.44	112.	1698.	2.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	15.	175.	10.	15.	0.	4.	10.	-	3.8	4.2(67.)	1860.
2	230.	15.	245.	30.	30.	0.	25.	27.	-	11.8	12.8(68.)	605.
3	290.	10.	300.	20.	25.	0.	13.	20.	-	6.7	7.2(70.)	1090.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
365	NWSESW 21 3S 4W	991	1150	2.16	133.	2204.	1.57

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	60.	300.	25.	25.	0.	3.	-1.	-	4.0	4.5(66.)	1780.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
366	SWNESE 22 3S 4W	0	1052	1.42	120.	3000.	1.35

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	35.	333.	25.	25.	0.	13.	13.	-	5.5	6.1(67.)	1300.
2	360.	25.	385.	25.	25.	0.	20.	25.	-	10.8	11.8(68.)	680.
3	435.	35.	470.	10.	10.	0.	-17.	-11.	-	1.5	1.5(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
367	NESWSW 22 3S 4W	858	759	1.92	160.	2042.	1.59

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	195.	70.	310.	25.	25.	0.	17.	15.	-	8.8	9.8(67.)	850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
368	SENESENE 22 3S 4W	936	1160	1.59	108.	2508.	0.94

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	75.	410.	30.	25.	0.	20.	23.	-	11.8	13.2(66.)	605.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
369	SESWNW 22 3S 4W	912	177	1.49	100.	2143.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	173.	17.	190.	25.	25.	0.	1.	6.	-	3.2	3.6(66.)	2180.
2	220.	65.	310.	30.	30.	0.	18.	23.	-	8.8	9.9(66.)	850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
370	NWSW 23 3S 4W	937	560	1.07	310.	2642.	1.53

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	385.	52.	400.	40.	25.	0.	17.	30.	-	7.2	7.7(69.)	1010.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
371	NWNESE 23 3S 4W	949	955	1.57	232.	1739.	1.81

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	28.	295.	35.	30.	0.	13.	17.	-	5.5	6.0(68.)	1300.
2	320.	80.	465.	40.	25.	0.	16.	20.	-	7.7	8.3(69.)	960.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
372	NENESE 23 3S 4W	946	280	1.99	200.	1550.	1.84

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	333.	30.	380.	25.	25.	0.	15.	13.	-	7.7	8.2(70.)	960.
2	405.	50.	455.	35.	20.	0.	22.	20.	-	17.0	17.9(71.)	458.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
373	SWSWSE 23 3S 4W	937	980	1.48	238.	2500.	1.50

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	263.	40.	310.	25.	16.	0.	19.	24.	-	10.0	11.0(67.)	750.
2	350.	55.	405.	45.	30.	0.	30.	30.	-	22.0	23.8(69.)	357.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
374	NWSENE 23 3S 4W	0	755	1.70	188.	1701.	2.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	340.	70.	510.	30.	30.	0.	14.	15.	-	6.7	7.0(71.)	1090.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
375	SWNENE 23 3S 4W	0	861	1.97	110.	2350.	1.55

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	90.	420.	25.	25.	0.	7.	5.	-	4.6	5.2(66.)	1540.
2	442.	40.	540.	30.	25.	0.	14.	12.	-	7.2	7.6(70.)	1010.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
376	SESWSW 23 3S 4W	936	880	0.89	244.	2500.	1.46

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	300.	73.	440.	25.	18.	0.	20.	36.	-	7.2	7.9(68.)	1010.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
377	SESWNW 23 3S 4W	943	1057	1.43	260.	3000.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	300.	58.	423.	25.	20.	0.	19.	25.	-	10.0	11.1(67.)	750.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
378	SESWSE 24 3S 4W	923	1254	1.69	207.	1693.	1.86

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	410.	60.	520.	45.	35.	0.	20.	22.	-	11.8	12.4(71.)	605.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
379	SWSESE 24 3S 4W	977	254	1.76	99.	2355.	0.91

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	27.	267.	30.	22.	0.	2.	3.	-	3.2	3.5(66.)	2180.
2	315.	80.	480.	20.	20.	0.	-8.	-7.	-	2.1	2.3(66.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
380	SENWSW 24 3S 4W	921	355	1.74	104.	1934.	1.78

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	30.	190.	45.	30.	0.	17.	18.	-	8.8	9.9(66.)	850.
2	340.	70.	470.	50.	35.	0.	23.	24.	-	19.0	20.3(70.)	407.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
381	NENWNW 25 3S 4W	914	355	1.60	173.	1503.	2.50

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	45.	240.	40.	25.	0.	13.	15.	-	6.7	7.3(68.)	1090.
2	300.	50.	350.	100.	40.	0.	20.	23.	-	10.8	11.4(71.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
382	SWSESE 25 3S 4W	977	254	1.76	98.	2335.	0.91

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	18.	258.	25.	22.	0.	2.	3.	-	3.2	3.6(66.)	2180.
2	315.	17.	332.	25.	20.	0.	-7.	-6.	-	2.1	2.3(66.)	3280.
3	370.	10.	402.	25.	20.	0.	-10.	-10.	-	1.7	1.9(67.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
383	SENENW 25 3S 4W	954	154	1.22	261.	2694.	1.73

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	26.	286.	15.	18.	0.	13.	23.	-	5.5	6.0(68.)	1300.
2	325.	18.	344.	30.	27.	0.	20.	31.	-	10.8	11.6(69.)	680.
3	378.	26.	404.	20.	25.	0.	10.	20.	-	4.9	5.2(70.)	1460.
4	543.	17.	560.	10.	15.	0.	-27.	-17.	-	1.0	1.0(73.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
384	SWNWNE 25 3S 4W	947	1254	2.13	100.	941.	2.60

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	46.	146.	100.	50.	0.	10.	6.	-	5.5	6.2(66.)	1300.
2	180.	16.	216.	22.	30.	0.	2.	-2.	-	3.8	4.1(68.)	1860.
3	304.	14.	330.	22.	36.	0.	17.	14.	-	10.8	11.3(71.)	680.
4	360.	48.	408.	100.	53.	0.	20.	15.	-	13.0	13.5(73.)	585.
5	592.	8.	602.	20.	21.	0.	-27.	-31.	-	1.1	1.1(79.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
385	NWNESE 26 3S 4W	905	850	2.52	101.	3184.	1.37

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	105.	25.	130.	25.	25.	0.	7.	1.	-	5.5	6.3(65.)	1300.

2	225.	23.	448.	25.	30.	0.	16.	10.	-	11.8	13.2(67.)	605.
3	353.	7.	360.	11.	15.	0.	-30.	-35.	-	1.1	1.3(68.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
386	NENENE 26 3S 4W	945	955	1.74	200.	3589.	1.46

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	200.	26.	226.	35.	20.	0.	20.	21.	-	11.8	13.2(66.)	605.
2	252.	18.	270.	35.	22.	0.	17.	19.	-	10.0	11.1(67.)	750.
3	330.	60.	390.	75.	25.	0.	30.	30.	-	FRESH	FRESH	FRESH
4	470.	14.	484.	15.	12.	0.	-20.	-19.	-	1.4	1.4(70.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
387	NENENW 26 3S 4W	933	166	1.33	217.	2716.	0.61

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	200.	43.	243.	25.	22.	0.	10.	18.	-	4.9	5.6(65.)	1460.
2	270.	70.	340.	40.	28.	0.	27.	27.	-	10.0	11.4(65.)	750.
3	360.	30.	390.	20.	20.	0.	10.	18.	-	4.9	5.5(66.)	1460.
4	450.	18.	468.	7.	10.	0.	-20.	-12.	-	1.4	1.5(66.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
388	NWNWNE 26 3S 4W	951	161	0.89	100.	2735.	0.97

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	138.	32.	170.	15.	20.	0.	17.	33.	-	5.5	6.3(65.)	1300.
2	184.	54.	238.	25.	24.	0.	23.	39.	-	10.0	11.3(65.)	750.
3	286.	48.	334.	30.	30.	0.	30.	30.	-	4.9	5.5(66.)	1460.
4	355.	16.	372.	25.	22.	0.	17.	34.	-	6.7	7.4(67.)	1090.
5	414.	22.	436.	10.	13.	0.	-8.	8.	-	1.5	1.7(68.)	4400.
6	452.	12.	464.	10.	13.	0.	-10.	5.	-	1.5	1.6(68.)	4400.
7	476.	8.	484.	7.	10.	0.	-17.	-1.	-	1.4	1.5(68.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
389	NWNWNE 27 3S 4W	0	1061	2.12	100.	2347.	1.56

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	120.	42.	230.	30.	25.	0.	5.	1.	-	4.0	4.5(65.)	1780.
2	300.	40.	372.	50.	30.	0.	17.	13.	-	10.0	10.9(68.)	750.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
390	SWNWNE 28 3S 4W	0	542	1.22	52.	2380.	1.53

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	Rw(75)	RWFORM(TEMP F)	TDS
1	100.	75.	275.	50.	25.	0.	10.	20.	-	4.9	5.6(65.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
391	NENENW 28 3S 4W	975	650	2.32	108.	2437.	1.83

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	83.	285.	35.	25.	0.	14.	9.	-	8.8	9.9(66.)	850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
392	SESENW 29 3S 4W	0	1042	2.28	65.	2747.	1.00

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	25.	105.	60.	60.	0.	10.	5.	-	5.5	6.2(65.)	1300.
2	153.	30.	190.	17.	35.	0.	-16.	-21.	-	1.5	1.7(65.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
393	SWSENE 30 3S 4W	0	642	2.13	70.	2993.	0.95

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	32.	180.	45.	25.	0.	3.	-1.	-	4.0	4.5(64.)	1780.
2	210.	45.	333.	20.	20.	0.	-13.	-17.	-	1.7	1.9(65.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
394	SESWSE 31 3S 4W	910	247	1.10	62.	3656.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	75.	100.	240.	30.	25.	0.	17.	29.	-	7.2	8.3(64.)	1010.
2	290.	20.	310.	15.	30.	0.	-15.	-3.	-	1.5	1.7(67.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
395	NESESE 32 3S 4W	886	366	1.50	114.	2780.	0.99

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	30.	160.	20.	20.	0.	-3.	8.	-	3.8	4.3(65.)	1860.
2	320.	40.	360.	13.	13.	0.	-11.	-6.	-	1.7	1.9(67.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
396	NESWSW 33 3S 4W	895	759	1.61	165.	2807.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	13.	383.	5.	7.	0.	-30.	-28.	-	0.8	0.9(68.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
397	NENESWNE 34 3S 4W	939	348	2.02	35.	979.	2.50

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	40.	30.	70.	50.	45.	0.	-11.	-14.	-	2.1	2.4(65.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
398	SESWNE 35 3S 4W	966	1064	1.72	156.	3640.	0.95

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	40.	210.	35.	35.	0.	15.	16.	-	7.7	8.8(65.)	960.
2	340.	40.	380.	30.	22.	0.	20.	21.	-	11.8	13.1(67.)	605.
3	460.	32.	490.	8.	14.	0.	-23.	-22.	-	1.1	1.3(68.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
399	NWNWSE 35 3S 4W	971	663	1.31	107.	3665.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	10.	170.	38.	35.	0.	10.	20.	-	5.3	6.0(65.)	1350.
2	225.	24.	250.	30.	27.	0.	17.	25.	-	8.2	9.2(66.)	900.
3	278.	18.	304.	24.	20.	0.	8.	17.	-	4.6	5.1(66.)	1540.
4	340.	28.	368.	45.	45.	0.	20.	28.	-	10.8	12.0(67.)	660.
5	455.	26.	504.	8.	10.	0.	-18.	-10.	-	1.4	1.5(68.)	4850.
6	550.	32.	582.	8.	10.	0.	-18.	-10.	-	1.4	1.5(69.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
400	NE 36 3S 4W	992	469	0.60	100.	1698.	1.56

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	165.	60.	335.	25.	22.	0.	28.	28.	27.3	2.5	2.8(66.)	2730.
2	410.	25.	435.	15.	15.	0.	3.	23.	27.3	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
401	NWSWNW 36 3S 4W	985	963	0.72	100.	3653.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	80.	360.	30.	25.	0.	20.	39.	-	5.5	6.3(65.)	1300.
2	573.	25.	660.	8.	10.	0.	-10.	9.	-	1.5	1.6(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
402	SESENE 36 3S 4W	989	1254	1.16	237.	2507.	1.74

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	274.	21.	295.	50.	20.	0.	17.	29.	-	7.7	8.4(68.)	960.
2	330.	16.	346.	45.	10.	0.	3.	14.	-	3.2	3.4(69.)	2160.
3	374.	32.	406.	25.	21.	0.	-10.	1.	-	1.7	1.8(70.)	3920.
4	478.	20.	498.	8.	13.	0.	-20.	-9.	-	1.4	1.4(72.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
403	SENWNE 36 3S 4W	985	362	0.88	106.	2811.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	40.	230.	45.	30.	0.	20.	36.	-	7.2	8.1(65.)	1010.
2	400.	12.	445.	25.	25.	0.	-7.	8.	-	1.7	1.9(68.)	3920.
3	532.	12.	444.	5.	10.	0.	-25.	-10.	-	0.8	0.9(69.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
404	SENESE 36 3S 4W	1009	469	2.45	100.	1500.	1.37

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	16.	146.	30.	52.	0.	-17.	-23.	27.3	1.5	1.7(65.)	4400.
2	190.	14.	204.	20.	35.	0.	-13.	-18.	27.3	2.1	2.3(66.)	3280.
3	290.	10.	300.	17.	30.	0.	-7.	-13.	21.2	2.6	2.9(67.)	2590.
4	360.	20.	400.	15.	25.	0.	-15.	-20.	21.2	2.1	2.2(68.)	3280.
5	450.	16.	466.	5.	13.	0.	-30.	-35.	27.3	1.1	1.2(70.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
405	NENENW 19 3S 5W	0	752	1.69	32.	2504.	1.46

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	16.	236.	15.	30.	0.	20.	22.	-	11.8	13.1(67.)	605.
2	300.	17.	317.	10.	10.	0.	-2.	-0.	-	2.6	2.9(68.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
406	NWNENE 22 3S 5W	0	856	2.22	100.	1342.	2.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	20.	120.	35.	30.	0.	7.	3.	-	4.9	5.5(66.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
407	NWNWNENE 22 3S 5W	0	876	1.87	24.	1053.	2.96

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	60.	20.	80.	35.	30.	0.	9.	8.	-	5.3	6.0(65.)	1350.
2	120.	20.	140.	10.	10.	0.	-11.	-12.	-	2.1	2.3(67.)	3280.
3	160.	45.	250.	12.	12.	0.	-20.	-21.	-	1.4	1.5(68.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
408	NESWNW 23 3S 5W	0	976	2.07	40.	1005.	2.44

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	55.	30.	85.	8.	8.	0.	-6.	-3.	-	4.6	5.3(65.)	1540.
2	155.	50.	230.	10.	10.	0.	-10.	-13.	-	2.1	2.3(67.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
409	NWNWNW 25 3S 5W	0	959	1.80	50.	2795.	1.48

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	115.	20.	135.	15.	20.	0.	-12.	-12.	-	5.5	6.2(65.)	1300.
2	210.	30.	270.	16.	16.	0.	-10.	-10.	-	2.1	2.3(67.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
410	SESENE 34 3S 5W	663	263	1.53	100.	3640.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	105.	15.	140.	18.	18.	0.	-10.	-15.	-	5.3	6.1(65.)	1350.
2	200.	27.	253.	8.	10.	0.	-11.	-7.	-	1.7	1.9(66.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
411	SWSWSW 1 4S 3E	705	754	1.38	90.	8270.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	40.	130.	100.	60.	0.	-8.	-1.	-	2.1	2.4(64.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
412	NWNWSE 13 4S 3E	841	968	1.40	225.	3419.	1.27

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	34.	264.	40.	40.	0.	-5.	2.	-	2.5	2.8(66.)	2730.
2	296.	20.	316.	25.	25.	0.	-22.	-15.	-	1.1	1.3(67.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
413	NENESE 6 4S 2E	785	955	1.74	204.	5498.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	320.	30.	350.	100.	33.	0.	-10.	-9.	-	2.1	2.3(67.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

414		SWSENE 5 4S 1E		909	761	2.49		90.	2185.		1.44			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED		SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	104.	12.	116.	60.	42.	0.		-3.	-9.	-	3.2	3.6(65.)		2180.
2	146.	34.	180.	100.	75.	0.		2.	-3.	-	4.0	4.5(66.)		1780.
3	200.	26.	226.	100.	55.	0.		-2.	-7.	-	3.8	4.2(66.)		1860.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)				
415		NE 19 4S 1E		954	1168	0.91		80.	6886.		1.02			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED		SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	86.	32.	118.	200.	75.	0.		-10.	5.	26.1	1.6	1.9(64.)		3750.
2	130.	12.	142.	75.	50.	0.		-20.	-10.	30.3	0.8	0.9(65.)		7000.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)				
416		NWNWSE 29 4S 1E		0	452	1.58		103.	2512.		1.61			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED		SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	132.	18.	150.	100.	75.	0.		8.	12.	-	FRESH	FRESH		FRESH
2	166.	40.	230.	100.	75.	0.		20.	24.	-	11.8	13.2(66.)		605.
3	332.	4.	336.	20.	25.	0.		-8.	-5.	-	2.1	2.2(69.)		3280.
4	442.	36.	490.	20.	30.	0.		-15.	-12.	-	1.5	1.6(71.)		4400.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)				
417		NWSENW 31 4S 1E		917	451	1.13		380.	8055.		1.32			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED		SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	468.	115.	600.	50.	20.	0.		-7.	5.	-	2.1	2.2(70.)		3280.
2	605.	50.	655.	75.	26.	0.		-15.	-3.	-	1.5	1.6(71.)		4400.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)				
418		NESENW 31 4S 1E		0	549	2.17		224.	4051.		1.25			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED		SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	240.	30.	270.	0.	0.	0.		10.	6.	-	5.5	6.1(66.)		1300.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)				
419		NESESE 31 4S 1E		0	552	1.62		133.	4542.		1.20			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED		SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)		TDS
1	200.	40.	240.	80.	30.	0.		-5.	-2.	-	2.5	2.8(66.)		2730.
2	340.	26.	370.	7.	12.	0.		-22.	-19.	-	1.4	1.5(68.)		4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
420	NENESE 15 4S 1W	921	162	1.77	128.	3578.	0.88

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	194.	10.	204.	40.	37.	0.	10.	12.	-	5.5	6.2(65.)	1300.
2	295.	8.	304.	40.	35.	0.	9.	10.	-	4.9	5.5(66.)	1460.
3	354.	100.	582.	75.	50.	0.	7.	8.	-	4.6	5.1(67.)	1540.
4	598.	34.	672.	60.	50.	0.	20.	21.	-	11.8	12.8(69.)	605.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
421	SWSWNW 18 4S 1W	988	1264	1.53	103.	3495.	0.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	36.	266.	30.	25.	0.	10.	14.	-	5.3	6.0(66.)	1350.
2	354.	53.	454.	35.	28.	0.	22.	25.	-	14.0	15.6(67.)	550.
3	510.	14.	524.	30.	27.	0.	12.	17.	-	5.5	6.0(68.)	1300.
4	585.	16.	602.	22.	22.	0.	-8.	-4.	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
422	NESWNE 20 4S 1W	0	1275	1.55	400.	8043.	1.00

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	430.	35.	465.	26.	23.	0.	20.	24.	-	11.8	12.9(68.)	605.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
423	SWSESW 26 4S 1W	927	850	1.68	153.	6404.	1.35

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	110.	350.	100.	45.	0.	-10.	-8.	-	2.1	2.3(66.)	3280.
2	420.	65.	530.	100.	50.	0.	26.	28.	-	FRESH	FRESH	FRESH
3	607.	12.	619.	30.	23.	0.	2.	4.	-	3.2	3.3(72.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
424	SWSWNW 31 4S 1W	817	1047	2.02	216.	4303.	0.85

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	360.	40.	400.	10.	5.	0.	-18.	-21.	-	1.5	1.7(67.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
425	SESESW 32 4S 1W	0	770	1.54	166.	3811.	1.35

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	50.	260.	20.	20.	0.	-10.	-6.	-	2.1	2.3(66.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
426	SESWSE 32 4S 1W	817	654	1.38	137.	4710.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	20.	175.	33.	30.	0.	10.	17.	-	5.3	6.0(65.)	1350.
2	260.	22.	282.	20.	20.	0.	10.	17.	-	4.9	5.5(66.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
427	SWSWNW 32 4S 1W	912	453	2.07	112.	6009.	0.92

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	112.	110.	210.	50.	35.	0.	17.	14.	-	10.0	11.5(65.)	750.
2	305.	20.	340.	10.	8.	0.	-11.	-14.	-	2.1	2.3(66.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
428	NWNWNW 35 4S 1W	920	250	1.58	137.	5269.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	43.	253.	50.	32.	0.	-5.	-2.	-	4.4	4.9(66.)	1400.
2	295.	45.	305.	50.	38.	0.	-4.	-1.	-	5.4	5.0(67.)	1130.
3	370.	30.	435.	25.	20.	0.	3.	6.	-	16.3	17.8(68.)	375.
4	433.	38.	550.	35.	35.	0.	20.	24.	-	11.8	12.8(69.)	605.
5	595.	40.	650.	10.	20.	0.	-23.	-20.	-	1.1	1.2(71.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
429	SWNWNE 1 4S 2W	947	861	1.13	204.	5015.	0.89

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	20.	300.	50.	32.	0.	13.	23.	-	5.5	6.2(66.)	1300.
2	358.	53.	438.	50.	35.	0.	28.	28.	-	7.2	8.0(67.)	1010.
3	490.	46.	590.	50.	27.	0.	30.	30.	-	8.2	9.0(68.)	900.
4	675.	20.	718.	20.	15.	0.	30.	31.	-	8.2	8.8(69.)	900.
5	849.	26.	888.	10.	10.	0.	-13.	-1.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
430	NESE 2 4S 2W	955	971	1.70	321.	6076.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	350.	55.	510.	35.	25.	0.	4.	5.	-	3.8	4.1(67.)	1860.
2	522.	28.	550.	35.	22.	0.	10.	12.	-	5.3	5.7(69.)	1350.
3	580.	20.	600.	20.	17.	0.	-8.	-5.	-	2.1	2.2(70.)	3280.
4	680.	30.	710.	32.	20.	0.	3.	5.	-	3.8	4.0(71.)	1860.
5	740.	20.	760.	20.	20.	0.	-20.	-19.	-	1.4	1.4(71.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
431	NE 5 4S 2W	0	870	0.80	125.	2150.	1.51

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	175.	63.	340.	15.	15.	0.	-5.	12.	-	1.7	1.9(66.)	3920.
2	360.	25.	385.	11.	13.	0.	-17.	0.	-	1.1	1.2(69.)	5700.
3	540.	70.	670.	15.	15.	0.	-8.	9.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
432	SWSESW 5 4S 2W	930	1248	1.15	197.	3848.	1.08

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	55.	395.	35.	17.	0.	18.	29.	-	7.7	8.6(67.)	960.
2	520.	20.	540.	17.	17.	0.	10.	21.	-	4.6	5.0(69.)	1540.
3	700.	60.	810.	13.	13.	0.	-7.	4.	-	2.1	2.2(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
433	NWSESESW 6 4S 2W	869	653	1.76	100.	2525.	1.64

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	20.	260.	20.	20.	0.	10.	11.	-	5.3	5.9(67.)	1350.
2	463.	25.	495.	50.	21.	0.	21.	24.	-	13.0	13.9(69.)	585.
3	530.	20.	550.	15.	15.	0.	3.	4.	-	3.8	3.9(72.)	1860.
4	570.	63.	675.	14.	11.	0.	-8.	-7.	-	2.1	2.1(73.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
434	SESENE 6 4S 2W	933	161	1.37	118.	4756.	0.85

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	95.	325.	15.	15.	0.	1.	8.	-	3.2	3.7(65.)	2180.
2	425.	70.	500.	20.	13.	0.	1.	8.	-	3.2	3.5(67.)	2180.
3	560.	80.	715.	20.	13.	0.	-2.	5.	-	2.6	2.9(68.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
435	SENESW 6 4S 2W	875	254	1.00	128.	3294.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	30.	340.	35.	15.	0.	30.	30.	-	6.7	7.5(66.)	1090.
2	480.	15.	501.	25.	12.	0.	30.	32.	-	7.2	7.7(70.)	1010.
3	570.	20.	590.	10.	10.	0.	15.	29.	-	5.5	5.8(71.)	1300.
4	660.	35.	750.	12.	12.	0.	2.	15.	-	2.6	2.8(72.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
436	SWNWSE 6 4S 2W	895	853	1.38	215.	2881.	1.54

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	255.	42.	330.	45.	20.	0.	17.	24.	-	8.2	9.0(67.)	900.
2	500.	35.	535.	55.	20.	0.	30.	30.	-	14.0	14.7(71.)	550.
3	615.	45.	735.	20.	10.	0.	-8.	-1.	-	2.1	2.1(73.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
437	NESENE 7 4S 2W	871	954	1.40	100.	3649.	0.95

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	15.	215.	25.	13.	0.	14.	21.	-	7.2	8.2(65.)	1010.
2	380.	50.	410.	50.	25.	0.	20.	27.	-	10.8	12.0(67.)	680.
3	540.	10.	550.	50.	50.	0.	10.	19.	-	5.5	6.0(69.)	1300.
4	600.	50.	650.	17.	13.	0.	-10.	-3.	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
438	SESENW 8 4S 2W	903	943	1.69	103.	2888.	1.47

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	115.	30.	170.	35.	25.	0.	3.	5.	-	3.8	4.3(65.)	1860.
2	238.	38.	373.	35.	25.	0.	10.	12.	-	5.3	5.9(67.)	1350.
3	440.	40.	545.	45.	25.	0.	17.	19.	-	8.6	9.4(70.)	850.
4	620.	10.	630.	25.	25.	0.	-17.	-17.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
439	SENWNW 8 4S 2W	0	150	1.34	326.	3820.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	380.	50.	480.	40.	20.	0.	23.	31.	-	14.0	15.2(69.)	550.
2	550.	30.	700.	20.	20.	0.	3.	11.	-	3.2	3.4(71.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
440	SE 9 4S 2W	0	1248	1.88	100.	3508.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	95.	345.	25.	20.	0.	16.	15.	-	8.2	9.3(65.)	900.
2	340.	50.	530.	13.	15.	0.	10.	9.	-	5.3	5.7(69.)	1350.
3	570.	7.	577.	25.	20.	0.	2.	1.	-	3.2	3.3(71.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
441	SE 9 4S 2W	914	1174	2.42	100.	3150.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	95.	110.	320.	30.	30.	0.	3.	-2.	-	4.6	5.3(65.)	1540.
2	355.	25.	380.	25.	25.	0.	1.	-4.	-	4.0	4.4(68.)	1780.
3	420.	12.	432.	20.	22.	0.	-1.	-6.	-	3.8	4.0(69.)	1860.
4	475.	55.	530.	15.	20.	0.	-14.	-19.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
442	SESWSE 9 4S 2W	886	159	1.59	120.	3593.	0.74

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	45.	225.	35.	20.	0.	20.	24.	-	11.8	13.5(65.)	605.
2	270.	40.	335.	25.	20.	0.	16.	20.	-	8.2	9.3(65.)	900.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
443	SENE 9 4S 2W	0	649	1.83	114.	2515.	1.45

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	25.	215.	20.	15.	0.	-3.	-3.	-	2.6	3.0(66.)	2590.
2	280.	30.	310.	12.	12.	0.	-17.	-17.	-	1.5	1.5(68.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
444	SESENW 11 4S 2W	929	750	1.06	266.	7117.	1.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	325.	18.	333.	30.	17.	0.	1.	14.	-	2.6	2.9(68.)	2590.
2	490.	60.	585.	50.	25.	0.	17.	30.	-	7.2	7.7(70.)	1010.
3	610.	20.	630.	30.	20.	0.	10.	23.	-	4.6	4.8(72.)	1540.
4	660.	20.	715.	30.	15.	0.	5.	18.	-	3.2	3.3(72.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
445	SESWSE 11 4S 2W	863	960	2.02	68.	2563.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	28.	178.	20.	17.	0.	5.	2.	-	4.0	4.5(65.)	1780.
2	253.	80.	400.	35.	27.	0.	15.	12.	-	8.2	9.1(67.)	900.
3	440.	28.	468.	25.	22.	0.	10.	7.	-	5.5	5.9(69.)	1300.
4	510.	18.	528.	14.	15.	0.	-17.	-20.	-	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
446	NWSESW 11 4S 2W	920	961	1.82	103.	3430.	1.47

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	80.	330.	25.	20.	0.	9.	9.	-	4.9	5.5(66.)	1460.
2	380.	120.	540.	35.	25.	0.	20.	20.	-	11.8	12.7(69.)	605.
3	585.	27.	640.	10.	14.	0.	-10.	-10.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
447	NENWSE 13 4S 2W	968	969	1.59	140.	3280.	1.48

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	30.	250.	30.	25.	0.	20.	23.	-	11.8	13.3(66.)	605.
2	310.	50.	430.	50.	25.	0.	28.	28.	-	22.0	24.0(68.)	357.
3	450.	75.	540.	35.	23.	0.	19.	22.	-	10.0	10.6(70.)	750.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
448	SWSENW 13 4S 2W	927	263	1.13	125.	2695.	0.76

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	10.	260.	25.	25.	0.	22.	25.	-	5.5	6.3(65.)	1300.
2	320.	60.	410.	45.	42.	0.	40.	40.	-	FRESH	FRESH	FRESH
3	435.	22.	465.	21.	21.	0.	18.	30.	-	8.2	9.1(67.)	900.
4	490.	20.	510.	15.	16.	0.	2.	14.	-	3.2	3.5(67.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
449	SWSWSW 14 4S 2W	0	1252	1.88	88.	4809.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	42.	345.	45.	32.	0.	19.	18.	-	11.8	13.3(66.)	605.
2	500.	30.	600.	12.	12.	0.	-15.	-16.	-	1.5	1.6(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
450	NENENW 14 4S 2W	888	161	2.17	102.	4794.	0.76

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	60.	280.	20.	16.	0.	2.	-2.	-	3.8	4.3(65.)	1860.
2	330.	60.	435.	25.	22.	0.	10.	6.	-	5.5	5.2(66.)	1300.
3	500.	30.	530.	14.	15.	0.	-13.	-17.	-	1.7	1.9(67.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
451	SWNWNE 14 4S 2W	876	562	2.11	167.	2770.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	20.	230.	20.	15.	0.	-2.	-6.	-	3.2	3.6(66.)	2180.
2	318.	22.	370.	40.	32.	0.	4.	1.	-	4.0	4.4(67.)	1780.
3	383.	10.	410.	30.	23.	0.	-5.	-9.	-	2.6	2.9(68.)	2590.
4	490.	20.	510.	13.	10.	0.	-5.	-9.	-	2.6	2.8(69.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
452	SWSWNW 15 4S 2W	845	659	1.34	136.	3146.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	20.	330.	50.	25.	0.	10.	18.	-	5.3	5.9(66.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
453	NWSWSE 15 4S 2W	871	971	1.00	296.	2625.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	360.	53.	500.	35.	35.	0.	-11.	3.	-	1.5	1.6(68.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
454	SESENW 15 4S 2W	876	1071	1.33	0.	2650.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	50.	217.	25.	25.	0.	19.	27.	-	10.0	11.4(65.)	750.
2	230.	35.	265.	30.	20.	0.	11.	19.	-	5.3	5.9(66.)	1350.
3	290.	80.	420.	50.	50.	0.	-7.	1.	-	2.1	2.3(67.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
455	NWNESW 15 4S 2W	866	1256	2.07	242.	3200.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	310.	40.	403.	50.	50.	0.	-20.	-23.	-	1.5	1.7(67.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
456	NWSWSW 21 4S 2W	0	1041	1.45	112.	3395.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	40.	300.	35.	20.	0.	18.	24.	-	8.4	10.0(65.)	850.
2	320.	50.	390.	55.	25.	0.	23.	29.	-	17.0	18.8(67.)	458.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
457	SWSESE 22 4S 2W	861	947	2.00	37.	3414.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	40.	285.	35.	25.	0.	10.	8.	-	5.5	6.3(64.)	1300.
2	205.	45.	270.	60.	30.	0.	26.	26.	-	FRESH	FRESH	FRESH
3	300.	38.	338.	50.	20.	0.	13.	11.	-	7.2	8.0(67.)	1010.
4	370.	30.	400.	50.	30.	0.	-13.	-15.	-	1.7	1.9(68.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
458	NWNESW 23 4S 2W	0	552	1.56	100.	5030.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	10.	180.	50.	23.	0.	20.	28.	-	22.0	24.9(66.)	357.
2	180.	45.	225.	45.	17.	0.	15.	19.	-	7.2	8.1(66.)	1010.
3	290.	53.	410.	10.	13.	0.	-10.	-6.	-	2.1	2.3(67.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
459	SESESE 23 4S 2W	0	572	1.62	177.	2500.	1.82

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	225.	65.	372.	30.	30.	0.	20.	23.	-	11.8	13.0(68.)	605.
2	440.	10.	450.	16.	18.	0.	5.	8.	-	4.0	4.2(72.)	1780.
3	485.	25.	510.	7.	14.	0.	-27.	-24.	-	1.0	1.0(72.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
460	SWNWSW 25 4S 2W	828	271	1.89	129.	2502.	1.86

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	30.	260.	50.	50.	0.	20.	19.	-	11.8	13.0(68.)	605.
2	303.	58.	470.	20.	20.	0.	-7.	-8.	-	2.1	2.2(69.)	3280.
3	490.	10.	500.	15.	22.	0.	-15.	-17.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
461	NENENENE 25 4S 2W	0	152	1.96	100.	2451.	1.32

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	50.	183.	45.	40.	0.	13.	11.	-	6.7	7.6(65.)	1090.
2	260.	50.	333.	45.	45.	0.	17.	15.	-	8.8	9.8(67.)	850.
3	350.	50.	430.	40.	27.	0.	7.	5.	-	4.6	5.0(68.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
462	SWNENE 26 4S 2W	0	450	1.15	65.	2991.	1.55

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	70.	55.	250.	25.	25.	0.	20.	31.	-	10.0	11.5(65.)	750.
2	280.	25.	353.	15.	20.	0.	10.	21.	-	4.6	5.0(68.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
463	SENWSE 26 4S 2W	0	350	1.76	140.	4056.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	10.	230.	15.	13.	0.	10.	11.	-	5.5	6.2(66.)	1300.
2	259.	25.	283.	30.	20.	0.	21.	22.	-	13.0	14.5(67.)	585.
3	300.	25.	325.	15.	12.	0.	7.	8.	-	4.6	5.1(67.)	1540.

4	420.	25.	445.	20.	17.	0.	-13.	-12.	-	1.7	1.8(69.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
464	NESENW 26 4S 2W	829	451	1.47	94.	2751.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	20.	120.	55.	40.	0.	20.	27.	-	13.0	14.9(65.)	585.
2	165.	8.	173.	15.	15.	0.	8.	13.	-	4.6	5.2(66.)	1540.
3	220.	25.	245.	50.	26.	0.	20.	25.	-	11.8	13.2(66.)	605.
4	280.	33.	340.	20.	12.	0.	-7.	-2.	-	2.1	2.3(67.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
465	SWNESW 26 4S 2W	876	850	1.47	95.	3647.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	112.	20.	170.	30.	25.	0.	15.	21.	-	7.7	8.8(65.)	960.
2	285.	68.	363.	55.	25.	0.	19.	24.	-	10.0	11.1(67.)	750.
3	390.	23.	413.	100.	27.	0.	8.	14.	-	4.6	5.0(68.)	1540.
4	440.	62.	520.	25.	25.	0.	-17.	-12.	-	1.5	1.5(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
466	SWNWSW 27 4S 2W	917	849	0.78	70.	2776.	1.60

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	75.	32.	240.	16.	20.	0.	-3.	15.	-	2.1	2.3(65.)	3280.
2	317.	18.	362.	30.	30.	0.	13.	32.	-	4.0	4.3(69.)	1780.
3	390.	23.	440.	15.	20.	0.	-7.	25.	-	3.2	3.4(70.)	2160.
4	470.	32.	512.	12.	25.	0.	-14.	4.	-	1.4	1.4(71.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
467	NENWNW 28 4S 2W	912	1040	1.83	100.	2346.	1.64

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	215.	30.	365.	15.	50.	0.	21.	21.	-	14.0	15.5(67.)	550.
2	373.	8.	381.	15.	50.	0.	15.	15.	-	7.7	8.2(70.)	960.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
468	NWNWNENW 26 4S 2W	923	849	1.73	58.	2449.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	95.	65.	265.	15.	25.	0.	5.	6.	-	4.0	4.6(65.)	1780.
2	380.	25.	410.	30.	30.	0.	5.	6.	-	4.0	4.4(68.)	1780.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
469	NESWSW 28 4S 2W	0	1051	2.50	95.	3999.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	40.	220.	35.	25.	0.	10.	5.	-	7.2	8.2(65.)	1010.
2	290.	15.	305.	40.	24.	0.	20.	16.	-	34.0	37.7(67.)	238.
3	320.	30.	440.	30.	25.	0.	14.	5.	-	10.8	11.9(67.)	680.
4	555.	103.	690.	20.	20.	0.	-15.	-20.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
470	NWNESW 28 4S 2W	0	1068	1.59	107.	2527.	1.64

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	20.	215.	35.	35.	0.	10.	14.	-	5.3	5.0(65.)	1350.
2	280.	70.	415.	40.	40.	0.	20.	23.	-	11.8	12.9(68.)	605.
3	492.	30.	524.	22.	26.	0.	-17.	-14.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
471	NENESW 29 4S 2W	967	849	1.75	165.	3306.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	53.	352.	55.	35.	0.	20.	21.	-	11.8	13.3(66.)	605.
2	420.	40.	530.	25.	25.	0.	-10.	-9.	-	2.1	2.2(69.)	3280.
3	562.	58.	620.	16.	17.	0.	-17.	-16.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
472	NESWNE 29 4S 2W	0	670	1.74	135.	3055.	1.35

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	195.	40.	240.	55.	55.	0.	20.	21.	-	11.8	13.2(66.)	605.
2	305.	23.	328.	55.	55.	0.	30.	31.	-	FRESH	FRESH	FRESH
3	390.	40.	480.	35.	35.	0.	20.	21.	-	11.8	12.8(69.)	605.
4	500.	37.	600.	17.	25.	0.	-13.	-12.	-	1.7	1.8(70.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
473	NWNWNW 30 4S 2W	970	748	1.85	55.	2140.	1.71

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	163.	70.	290.	60.	30.	0.	10.	9.	-	5.3	5.9(66.)	1350.
2	315.	25.	342.	60.	30.	0.	19.	19.	-	11.8	12.8(69.)	605.
3	400.	15.	415.	22.	22.	0.	-8.	-9.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
474	NWSESE 31 4S 2W	0	848	2.09	93.	4362.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	105.	300.	60.	40.	0.	-2.	-5.	-	2.6	3.0(65.)	2590.
2	360.	10.	370.	25.	22.	0.	3.	-0.	-	4.0	4.4(67.)	1760.
3	390.	50.	495.	40.	25.	0.	15.	12.	-	0.2	0.0(67.)	900.
4	550.	53.	730.	35.	25.	0.	-10.	-13.	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
475	NWNWNW 32 4S 2W	0	1146	1.54	271.	3503.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	270.	100.	360.	75.	40.	0.	30.	30.	-	34.0	37.6(67.)	238.
2	430.	30.	490.	50.	30.	0.	20.	24.	-	11.8	12.7(69.)	605.
3	640.	30.	670.	22.	22.	0.	-11.	-7.	-	1.7	1.8(72.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
476	NWNWNW 33 4S 2W	0	551	2.01	136.	3995.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	52.	270.	60.	60.	0.	3.	0.	-	3.8	4.3(65.)	1860.
2	240.	20.	310.	20.	25.	0.	7.	5.	-	4.6	5.1(67.)	1540.
3	290.	50.	432.	60.	50.	0.	30.	30.	-	FRESH	FRESH	FRESH
4	465.	42.	510.	50.	30.	0.	20.	18.	-	13.0	14.0(69.)	585.
5	550.	40.	630.	40.	40.	0.	14.	12.	-	7.7	8.2(70.)	960.
6	705.	35.	740.	15.	25.	0.	-10.	-13.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
477	SWNENE 34 4S 2W	919	551	2.22	106.	4713.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	62.	310.	30.	30.	0.	20.	16.	-	14.0	15.9(65.)	550.
2	390.	20.	410.	50.	35.	0.	30.	31.	-	FRESH	FRESH	FRESH
3	450.	32.	520.	30.	30.	0.	20.	16.	-	14.0	15.1(69.)	550.
4	575.	70.	625.	20.	20.	0.	-10.	-14.	-	2.1	2.2(70.)	3280.
5	700.	35.	735.	15.	15.	0.	-14.	-18.	-	1.7	1.8(72.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
478	NESESE 35 4S 2W	838	150	1.34	132.	4455.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	60.	340.	45.	17.	0.	20.	28.	-	10.8	12.1(66.)	680.
2	365.	30.	440.	25.	20.	0.	17.	25.	-	8.2	9.0(68.)	900.
3	460.	45.	525.	15.	12.	0.	-9.	-1.	-	2.1	2.2(69.)	3280.
4	640.	60.	700.	10.	10.	0.	-20.	-12.	-	1.4	1.4(71.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
479	SESENW 35 4S 2W	879	1248	1.10	129.	3612.	1.48

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	28.	203.	50.	50.	0.	20.	32.	-	8.8	9.9(66.)	850.
2	277.	20.	340.	13.	13.	0.	10.	22.	-	4.6	5.1(68.)	1540.
3	368.	27.	395.	50.	36.	0.	23.	36.	-	13.0	14.0(69.)	585.
4	420.	25.	445.	35.	25.	0.	17.	30.	-	7.2	7.7(70.)	1010.
5	548.	15.	655.	15.	25.	0.	-15.	-4.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
480	SWSENE 35 4S 2W	866	349	1.53	142.	3922.	1.42

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	55.	345.	60.	22.	0.	58.	58.	-	FRESH	FRESH	FRESH
2	368.	40.	440.	45.	25.	0.	39.	39.	-	FRESH	FRESH	FRESH
3	470.	50.	520.	30.	20.	0.	20.	24.	-	10.8	11.5(70.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
481	NWSWNE 36 4S 2W	0	875	2.05	136.	4907.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	20.	200.	25.	20.	0.	10.	7.	-	5.5	6.2(65.)	1300.
2	210.	13.	223.	40.	22.	0.	1.	-2.	-	3.2	3.6(66.)	2180.
3	270.	32.	302.	8.	8.	0.	-22.	-25.	-	1.4	1.5(67.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
482	SWSWNE 36 4S 2W	827	1049	1.18	103.	2895.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	30.	190.	50.	50.	0.	30.	30.	-	8.8	10.0(66.)	850.
2	220.	10.	230.	35.	20.	0.	20.	34.	-	13.0	14.5(66.)	585.
3	380.	37.	417.	7.	13.	0.	-25.	-15.	-	1.0	1.1(68.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
483	NESWSE 36 4S 2W	859	949	1.78	100.	3561.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	15.	225.	50.	50.	0.	4.	5.	-	4.0	4.5(65.)	1780.
2	253.	10.	263.	35.	25.	0.	-13.	-15.	-	7.7	8.6(66.)	960.
3	300.	30.	350.	12.	12.	0.	-19.	-19.	-	1.5	1.7(67.)	4400.
4	410.	22.	432.	8.	10.	0.	-30.	-30.	-	1.0	1.1(68.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
484	SWSENW 36 4S 2W	0	549	1.45	102.	3152.	1.70

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	30.	200.	25.	15.	0.	17.	23.	-	8.2	9.2(66.)	900.
2	235.	20.	255.	30.	15.	0.	23.	30.	-	19.0	20.9(67.)	407.
3	270.	40.	315.	20.	12.	0.	-10.	-4.	-	2.1	2.2(68.)	3280.
4	393.	27.	420.	6.	10.	0.	-29.	-23.	-	1.0	1.1(70.)	8500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
485	NESESW 36 4S 2W	856	1049	1.50	93.	4233.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	12.	240.	20.	20.	0.	10.	16.	-	5.3	5.9(66.)	1350.
2	275.	16.	291.	30.	25.	0.	17.	23.	-	8.8	9.8(67.)	850.
3	313.	27.	340.	15.	15.	0.	6.	11.	-	4.0	4.4(67.)	1780.
4	390.	22.	412.	25.	25.	0.	-8.	-3.	-	2.1	2.2(68.)	3280.
5	445.	17.	470.	13.	13.	0.	-20.	-15.	-	1.4	1.5(69.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
486	NESESW 1 4S 3W	881	454	1.25	148.	3712.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	37.	275.	30.	30.	0.	12.	21.	-	5.5	6.2(66.)	1300.
2	290.	10.	300.	35.	35.	0.	18.	30.	-	10.8	11.9(67.)	680.
3	310.	60.	450.	50.	40.	0.	20.	29.	-	10.0	11.0(67.)	750.
4	515.	30.	560.	12.	12.	0.	-20.	-11.	-	1.4	1.4(70.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
487	NESESE 1 4S 3W	875	957	1.65	169.	3980.	1.42

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	18.	208.	35.	18.	0.	18.	21.	-	10.8	12.1(66.)	680.
2	250.	30.	350.	25.	20.	0.	17.	19.	-	8.8	9.7(67.)	850.
3	402.	18.	420.	80.	35.	0.	25.	28.	-	34.0	36.6(69.)	238.
4	462.	10.	472.	40.	37.	0.	22.	25.	-	17.0	18.1(70.)	456.
5	590.	43.	433.	25.	15.	0.	-10.	-9.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
488	NESWNW 2 4S 3W	0	845	2.20	28.	1546.	1.71

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	50.	50.	110.	50.	50.	0.	10.	6.	-	5.5	6.3(64.)	1300.
2	120.	40.	160.	50.	50.	0.	13.	9.	-	7.7	8.7(66.)	960.
3	310.	26.	336.	25.	30.	0.	-11.	-15.	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
489	NWSWNW 2 4S 3W	0	1168	1.60	35.	1902.	1.39

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	87.	23.	108.	55.	42.	0.	12.	16.	-	5.5	6.3(65.)	1300.
2	190.	49.	250.	55.	50.	0.	17.	20.	-	8.2	9.2(66.)	900.
3	290.	35.	325.	45.	45.	0.	5.	8.	-	4.0	4.4(68.)	1780.
4	330.	26.	356.	30.	30.	0.	-1.	2.	-	2.6	2.9(68.)	2590.
5	490.	43.	533.	25.	25.	0.	-16.	-13.	-	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
490	NESE 3 4S 3W	915	662	1.87	27.	1228.	2.65

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	68.	180.	45.	33.	0.	20.	19.	-	11.8	13.2(66.)	605.
2	200.	13.	228.	40.	25.	0.	7.	7.	-	4.6	5.0(69.)	1540.
3	282.	8.	230.	30.	20.	0.	-8.	-9.	-	2.1	2.2(71.)	3280.
4	320.	30.	360.	25.	25.	0.	-18.	-19.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
491	NESWSW 3 4S 3W	952	663	2.01	0.	1275.	2.08

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	145.	27.	190.	30.	30.	0.	10.	7.	-	5.5	6.1(67.)	1300.
2	210.	10.	250.	30.	30.	0.	6.	4.	-	4.6	5.0(68.)	1540.
3	318.	12.	330.	15.	15.	0.	-21.	-24.	-	1.4	1.4(70.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
492	NESENE 3 4S 3W	854	562	2.11	100.	630.	3.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	162.	18.	180.	25.	35.	0.	12.	9.	-	5.7	7.3(69.)	1090.
2	203.	67.	278.	45.	45.	0.	19.	15.	-	11.8	12.5(70.)	605.
3	362.	40.	422.	8.	11.	0.	-4.	-8.	-	2.6	2.6(76.)	2590.
4	435.	12.	447.	50.	50.	0.	-18.	-24.	-	1.5	1.5(78.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
493	SE 3 4S 3W	900	1072	1.29	30.	1125.	2.36

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	55.	10.	65.	20.	70.	0.	-20.	-13.	24.2	1.1	1.3(65.)	5700.
2	75.	26.	113.	50.	50.	0.	20.	23.	30.9	10.8	12.3(65.)	680.
3	140.	10.	150.	40.	40.	0.	11.	22.	24.8	5.5	6.1(67.)	1300.
4	205.	63.	310.	20.	20.	0.	-4.	5.	24.2	2.5	2.7(68.)	2730.
5	360.	30.	405.	12.	12.	0.	-11.	-2.	24.2	1.7	1.8(72.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)			
494		NW 3 4S 3W		906	871	0.79	50.	1150.	2.22			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	70.	10.	80.	35.	35.	35.	15.	35.	23.0	5.5	5.3(65.)	1300.
2	120.	42.	162.	25.	25.	25.	27.	27.	27.3	3.8	4.2(66.)	1860.
3	190.	10.	200.	35.	35.	35.	15.	35.	24.2	5.5	5.0(68.)	1300.
4	220.	20.	240.	40.	40.	40.	20.	39.	27.9	7.2	7.8(68.)	1010.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)			
495		SW 3 4S 3W		902	1072	1.09	100.	1150.	2.13			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	20.	150.	35.	35.	35.	10.	23.	27.3	4.6	5.1(66.)	1540.
2	163.	18.	181.	25.	25.	25.	3.	15.	24.2	3.2	3.5(67.)	2180.
3	235.	10.	255.	13.	13.	13.	-3.	3.	24.2	2.5	2.7(69.)	2730.
4	300.	14.	314.	20.	20.	20.	-19.	-9.	24.2	1.1	1.2(70.)	5700.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)			
496		NWNWNW 4 4S 3W		0	469	1.09	80.	1200.	2.29			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	45.	180.	50.	50.	50.	15.	27.	-	5.5	6.2(66.)	1300.
2	220.	13.	233.	40.	40.	40.	20.	35.	-	11.8	12.8(69.)	605.
3	280.	10.	290.	60.	60.	60.	9.	24.	-	4.9	5.2(70.)	1460.
4	315.	10.	325.	30.	30.	30.	-6.	5.	-	2.1	2.2(71.)	3280.
5	360.	62.	422.	10.	12.	10.	-23.	-11.	-	1.1	1.2(72.)	5700.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)			
497		NWNW 4 4S 3W		0	369	1.48	10.	1022.	1.61			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	95.	28.	138.	40.	40.	40.	10.	15.	27.3	5.3	5.0(65.)	1350.
2	170.	13.	183.	33.	33.	33.	-22.	-19.	27.3	1.1	1.3(66.)	5700.
3	190.	40.	240.	24.	24.	24.	7.	12.	24.2	4.0	4.5(67.)	1780.
4	285.	43.	350.	9.	9.	9.	-22.	-17.	24.2	1.1	1.3(68.)	5700.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)			
498		SWSWSW 4 4S 3W		0	369	1.31	10.	1115.	1.57			
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	50.	33.	160.	30.	30.	30.	6.	16.	26.1	4.6	5.3(64.)	1540.
2	180.	12.	192.	25.	25.	25.	10.	19.	24.2	5.3	5.9(66.)	1350.
3	225.	72.	300.	8.	8.	9.	-19.	-11.	26.7	1.4	1.5(67.)	4850.
WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)			

WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
499		NENE 4 4S 3W		0	569	1.97	97.	1200.	1.79

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	53.	193.	30.	30.	30.	20.	18.	27.3	13.0	14.6(66.)	585.
2	202.	23.	225.	50.	50.	60.	21.	19.	27.3	14.0	15.5(67.)	550.
3	300.	11.	311.	50.	50.	55.	16.	16.	24.2	10.8	11.7(69.)	680.
4	397.	13.	410.	10.	10.	14.	-19.	-22.	21.2	1.5	1.6(71.)	4400.

WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
500		NESWSE 5 4S 3W		0	851	1.51	165.	2988.	0.95

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	18.	188.	50.	27.	0.	12.	18.	-	5.5	6.3(65.)	1300.
2	230.	30.	260.	100.	45.	0.	5.	10.	-	4.0	4.5(66.)	1780.
3	260.	33.	293.	32.	22.	0.	-15.	-10.	-	1.5	1.7(66.)	4400.

WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
501		NESW 5 4S 3W		999	757	1.36	90.	1292.	1.74

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	188.	24.	212.	35.	50.	0.	-8.	15.	-	4.6	5.1(67.)	1540.
2	303.	22.	343.	7.	7.	0.	-30.	-25.	-	0.8	0.9(69.)	7800.

WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
502		NWSENE 5 4S 3W		0	747	2.07	59.	930.	1.99

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	70.	10.	80.	50.	50.	0.	4.	1.	-	4.0	4.6(65.)	1780.
2	190.	30.	220.	50.	50.	0.	11.	8.	-	5.5	5.1(67.)	1300.
3	260.	30.	290.	50.	50.	0.	-9.	5.	-	5.3	5.7(69.)	1350.
4	345.	30.	395.	13.	13.	0.	-30.	-33.	-	1.0	1.1(70.)	6500.

WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
503		NWNW 5 4S 3W		978	572	1.77	80.	1370.	1.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	20.	200.	32.	32.	32.	11.	12.	24.2	5.5	6.1(67.)	1300.
2	225.	35.	260.	22.	22.	22.	7.	7.	27.3	4.6	5.0(68.)	1540.
3	300.	30.	350.	23.	23.	23.	12.	12.	27.3	5.5	5.9(69.)	1300.
4	370.	28.	402.	12.	12.	12.	-30.	-30.	24.2	1.0	1.1(71.)	6500.

WELL NUMBER		LOCATION		DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
504		SE 5 4S 3W		997	373	1.69	100.	1394.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	160.	15.	175.	70.	70.	0.	11.	14.	-	5.5	6.2(65.)	1300.
2	240.	17.	257.	30.	30.	30.	-2.	-0.	-	2.6	3.0(66.)	2590.
3	333.	17.	350.	22.	30.	22.	-4.	-2.	-	2.6	2.9(67.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
505	SESESESE 6 4S 3W	0	454	2.12	100.	823.	2.00

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	10.	180.	20.	40.	0.	-8.	-12.	-	2.1	2.3(67.)	3280.
2	270.	30.	337.	35.	40.	0.	-11.	-15.	-	2.1	2.2(69.)	3280.
3	360.	50.	410.	20.	27.	0.	-20.	-24.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
506	SENENESE 8 4S 2W	981	754	1.77	100.	1124.	2.36

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	31.	151.	40.	37.	0.	19.	19.	-	10.8	12.1(66.)	680.
2	190.	30.	220.	45.	45.	0.	17.	17.	-	8.8	9.6(68.)	850.
3	265.	75.	350.	9.	9.	0.	-20.	-20.	-	1.4	1.4(70.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
507	NENWNW 9 4S 3W	960	755	1.92	46.	1105.	3.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	30.	110.	50.	50.	0.	10.	8.	-	5.5	6.2(66.)	1300.
2	220.	40.	260.	15.	18.	0.	-17.	-19.	-	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
508	SE 9 4S 3W	0	771	1.36	50.	1240.	2.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	55.	220.	40.	40.	0.	10.	17.	26.7	4.9	5.5(65.)	1460.
2	275.	55.	347.	7.	7.	0.	-20.	-13.	-	1.4	1.5(69.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
509	NE 9 4S 3W	0	779	1.12	50.	1140.	2.76

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	50.	22.	57.	13.	13.	0.	10.	22.	30.3	4.6	5.2(65.)	1540.
2	100.	20.	120.	25.	25.	0.	15.	27.	30.3	6.7	7.5(66.)	1090.
3	145.	90.	235.	20.	20.	0.	12.	24.	27.3	5.3	5.8(68.)	1350.
4	280.	20.	300.	9.	9.	0.	-10.	2.	24.2	1.7	1.8(71.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
510	NW 10 4S 3W	0	972	1.04	50.	1130.	2.65

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	20.	100.	32.	32.	0.	11.	25.	24.8	4.9	5.5(66.)	1460.
2	130.	14.	144.	40.	50.	0.	25.	28.	24.8	5.5	5.1(67.)	1300.
3	165.	20.	206.	40.	40.	0.	19.	33.	24.2	8.8	9.6(68.)	850.
4	230.	25.	265.	30.	40.	0.	20.	33.	24.2	8.2	8.8(70.)	900.
5	300.	17.	317.	13.	13.	0.	-5.	8.	23.6	2.1	2.1(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
511	NE 10 4S 3W	0	972	0.94	50.	1150.	2.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	165.	15.	180.	40.	40.	40.	23.	26.	27.3	4.0	4.4(67.)	1780.
2	230.	53.	305.	40.	40.	40.	20.	35.	27.3	7.7	8.4(69.)	960.
3	310.	35.	355.	20.	20.	20.	10.	25.	24.8	4.0	4.2(70.)	1780.
4	360.	12.	372.	11.	11.	11.	-5.	9.	24.8	2.1	2.1(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
512	SENENESE 10 4S 3W	997	349	1.26	100.	1507.	2.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	22.	132.	50.	20.	0.	2.	11.	-	3.2	3.6(66.)	2160.
2	175.	95.	306.	50.	25.	0.	11.	20.	-	5.3	5.9(67.)	1350.
3	325.	23.	357.	45.	30.	0.	-10.	-1.	-	1.7	1.8(70.)	3920.
4	380.	15.	395.	20.	20.	0.	-22.	-14.	-	1.1	1.2(71.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
513	SESESE 13 4S 3W	928	948	1.68	30.	1102.	2.59

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	70.	27.	97.	35.	40.	0.	-14.	-12.	-	1.5	1.7(65.)	4400.
2	110.	55.	165.	100.	100.	0.	-16.	-18.	-	8.2	9.2(66.)	900.
3	290.	42.	342.	15.	15.	0.	-15.	-13.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
514	SENWSW 13 4S 3W	919	1049	1.09	70.	1931.	2.82

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	40.	130.	50.	32.	0.	-30.	-18.	-	0.8	0.9(66.)	7800.
2	150.	10.	160.	35.	35.	0.	-22.	-14.	-	1.0	1.1(68.)	6500.
3	230.	70.	320.	30.	30.	0.	-12.	0.	-	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
515	SWSWNW 13 4S 3W	0	448	1.41	50.	1192.	2.47

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	23.	113.	6.	33.	0.	-40.	-34.	-	0.7	0.8(66.)	9400.
2	120.	30.	150.	10.	33.	0.	-3.	3.	-	2.6	3.0(66.)	2590.
3	180.	33.	250.	40.	45.	0.	10.	16.	-	4.9	5.4(68.)	1460.
4	298.	34.	357.	20.	35.	0.	-20.	-14.	-	1.4	1.4(71.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
516	SW 13 4S 3W	946	373	0.60	100.	1192.	2.39

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	143.	25.	210.	40.	40.	0.	20.	41.	27.3	4.9	5.4(67.)	1460.
2	240.	10.	250.	25.	25.	0.	10.	32.	26.7	3.2	3.4(69.)	2180.
3	260.	32.	292.	60.	60.	0.	-3.	17.	24.2	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
517	SENENW 14 4S 3W	0	352	1.35	122.	1505.	1.83

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	10.	140.	45.	45.	0.	-5.	2.	-	2.1	2.3(66.)	3280.
2	175.	33.	230.	50.	50.	0.	20.	28.	-	10.8	12.0(67.)	680.
3	400.	22.	450.	10.	15.	0.	-20.	-12.	-	1.4	1.4(71.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
518	NESESE 15 4S 3W	1015	648	1.52	70.	1260.	2.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	20.	200.	50.	50.	0.	-10.	-6.	-	1.7	1.9(67.)	3920.
2	220.	45.	265.	20.	25.	0.	-15.	-11.	-	1.5	1.6(68.)	4400.
3	320.	23.	360.	7.	20.	0.	-40.	-35.	-	0.7	0.7(71.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
519	NWSENE 15 4S 3W	0	747	2.07	50.	930.	2.85

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	10.	170.	50.	50.	0.	2.	-1.	-	3.8	4.1(68.)	1860.
2	190.	20.	210.	50.	50.	0.	10.	7.	-	5.5	5.9(69.)	1300.
3	270.	20.	290.	50.	50.	0.	-10.	-13.	-	2.1	2.1(71.)	3280.
4	343.	29.	395.	12.	12.	0.	-30.	-33.	-	1.0	1.0(73.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
520	SENWNE 16 4S 3W	0	349	1.47	100.	1500.	1.90

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	20.	170.	50.	50.	0.	-11.	-5.	-	1.7	1.9(66.)	3920.
2	190.	27.	220.	50.	50.	0.	-2.	3.	-	2.6	2.9(67.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
521	NESENW 16 4S 3W	0	846	1.80	20.	1053.	2.61

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	30.	30.	60.	35.	35.	0.	5.	5.	-	4.0	4.6(64.)	1780.
2	100.	30.	130.	100.	100.	0.	10.	10.	-	5.3	5.9(66.)	1350.
3	190.	60.	300.	50.	50.	0.	7.	7.	-	4.6	5.0(68.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
522	SWNESW 16 4S 3W	0	254	1.58	70.	2109.	2.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	70.	60.	180.	35.	35.	0.	1.	5.	-	3.2	3.6(65.)	2180.
2	265.	15.	310.	35.	35.	0.	-1.	3.	-	2.6	2.9(69.)	2590.
3	340.	55.	395.	35.	35.	0.	2.	5.	-	3.2	3.4(71.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
523	SESESW 17 4S 3W	959	347	1.74	296.	3556.	1.39

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	340.	30.	370.	40.	30.	0.	14.	15.	-	7.2	7.8(68.)	1010.
2	500.	35.	587.	35.	35.	0.	-10.	-9.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
524	NENESW 18 4S 3W	0	856	2.05	194.	4823.	0.88

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	35.	320.	50.	40.	0.	1.	-2.	-	3.2	3.6(66.)	2180.
2	340.	80.	430.	40.	25.	0.	14.	11.	-	7.7	8.6(66.)	960.
3	480.	50.	640.	20.	20.	0.	2.	-1.	-	3.8	4.1(68.)	1860.
4	670.	50.	720.	15.	15.	0.	-10.	-1[illegible].	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
525	NENENE 19 4S 3W	947	1146	1.32	301.	5103.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	25.	415.	50.	30.	0.	25.	26.	-	8.2	9.0(68.)	900.
2	435.	15.	450.	35.	15.	0.	16.	25.	-	8.2	8.9(68.)	900.
3	630.	25.	655.	35.	15.	0.	5.	13.	-	3.8	4.0(70.)	1860.
4	700.	37.	742.	20.	15.	0.	-5.	3.	-	2.5	2.6(71.)	2730.
5	770.	10.	780.	25.	25.	0.	-7.	0.	-	2.1	2.1(72.)	3280.
6	810.	21.	831.	15.	15.	0.	-15.	-7.	-	1.5	1.5(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
526	SWNENESW 22 4S 3W	0	849	1.78	59.	2434.	1.83

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	23.	183.	50.	17.	0.	5.	5.	-	4.0	4.5(66.)	1780.
2	210.	100.	380.	50.	15.	0.	20.	20.	-	11.8	13.0(67.)	605.
3	420.	20.	440.	50.	15.	0.	17.	18.	-	8.8	9.2(71.)	850.
4	483.	32.	515.	40.	12.	0.	-12.	-12.	-	1.7	1.8(72.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
527	SESESE 22 4S 3W	998	264	0.83	328.	5850.	0.91

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	455.	25.	480.	25.	22.	0.	40.	41.	-	10.0	11.0(68.)	750.
2	510.	27.	537.	17.	15.	0.	15.	32.	-	4.9	5.3(68.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
528	SENE 23 4S 3W	991	454	1.97	75.	1252.	2.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	98.	10.	110.	40.	40.	0.	10.	9.	-	5.5	6.2(66.)	1300.
2	187.	13.	200.	43.	43.	0.	15.	14.	-	8.8	9.7(67.)	850.
3	230.	11.	241.	30.	30.	0.	-10.	-13.	-	2.1	2.2(68.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
529	SWNW 23 4S 3W	979	1172	1.58	50.	1475.	1.46

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	35.	200.	60.	60.	0.	20.	24.	-	11.8	13.3(66.)	605.
2	300.	18.	318.	50.	35.	0.	26.	28.	-	22.0	24.1(68.)	357.
3	340.	20.	373.	20.	20.	0.	4.	8.	-	3.8	4.1(68.)	1860.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
530	SWNESE 23 4S 3W	0	1057	1.26	80.	1219.	2.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	20.	110.	45.	40.	0.	15.	25.	-	7.2	8.1(65.)	1010.
2	130.	20.	240.	35.	35.	0.	20.	30.	-	10.8	12.1(66.)	680.
3	265.	30.	305.	25.	25.	0.	35.	35.	-	22.0	23.7(69.)	357.
4	320.	17.	337.	21.	21.	0.	18.	28.	-	8.8	9.3(70.)	850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
531	SESESE 24 4S 3W	950	848	1.66	40.	2178.	1.91

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	55.	210.	100.	35.	0.	12.	14.	-	5.5	6.2(66.)	1300.
2	230.	70.	340.	70.	25.	0.	21.	23.	-	13.0	14.2(68.)	585.
3	353.	10.	363.	35.	25.	0.	12.	16.	-	6.7	7.1(70.)	1090.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
532	SE 24 4S 3W	948	1072	1.60	50.	1350.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	60.	35.	117.	50.	50.	0.	-2.	1.	-	2.6	3.0(64.)	2590.
2	200.	15.	215.	50.	50.	0.	12.	17.	-	6.7	7.5(66.)	1090.
3	280.	20.	300.	50.	35.	0.	5.	8.	-	4.0	4.4(67.)	1780.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
533	SWSENE 24 4S 3W	0	1248	1.15	30.	1152.	2.99

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	48.	138.	70.	50.	0.	5.	16.	-	3.8	4.2(66.)	1860.
2	160.	25.	185.	30.	50.	0.	12.	23.	-	5.3	5.8(68.)	1350.
3	240.	30.	270.	10.	25.	0.	-7.	4.	-	2.1	2.2(71.)	3280.
4	305.	15.	320.	12.	25.	0.	-12.	-1.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
534	SWNW 24 4S 3W	972	872	1.81	50.	1355.	2.31

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	88.	14.	102.	60.	60.	0.	6.	7.	27.3	4.6	5.2(66.)	1540.
2	115.	22.	158.	25.	25.	0.	2.	2.	31.5	3.2	3.6(66.)	2180.
3	288.	17.	305.	40.	40.	0.	20.	21.	31.5	13.0	13.8(70.)	585.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
535	SWSE 24 4S 3W	955	1072	1.06	80.	1375.	1.42

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	125.	115.	330.	50.	50.	0.	5.	18.	26.7	3.2	3.6(65.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
536	NENESWSW 24 4S 3W	961	1048	1.76	100.	2747.	1.66

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	72.	10.	82.	22.	22.	0.	3.	4.	-	3.8	4.3(65.)	1860.
2	190.	10.	200.	25.	25.	0.	-5.	-5.	-	2.5	2.8(67.)	2730.
3	230.	38.	297.	30.	30.	0.	-2.	-1.	-	2.6	2.9(67.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
537	NW 25 4S 3W	0	1148	1.25	57.	2094.	1.36

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	50.	200.	45.	35.	0.	10.	19.	-	4.9	5.6(65.)	1460.
2	270.	48.	350.	35.	30.	0.	20.	30.	-	10.0	11.1(67.)	750.
3	260.	30.	290.	20.	20.	0.	5.	14.	-	3.8	4.2(67.)	1860.

4	525.	45.	570.	12.	14.	0.	-10.	-1.	-	1.7	1.8(71.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
538	SENENE 25 4S 3W	978	948	1.66	134.	2193.	1.44

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	60.	190.	50.	50.	0.	19.	21.	-	10.8	12.2(65.)	680.
2	210.	20.	230.	32.	32.	0.	26.	29.	-	FRESH	FRESH	FRESH
3	270.	45.	360.	35.	35.	0.	13.	15.	-	6.7	7.4(67.)	1050.
4	415.	15.	430.	23.	23.	0.	-12.	-10.	-	1.7	1.8(69.)	3920.
5	520.	67.	603.	10.	20.	0.	-20.	-18.	-	1.4	1.4(71.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
539	SWSWNW 27 4S 3W	925	660	2.11	103.	3911.	0.98

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	132.	130.	350.	50.	30.	0.	1.	-3.	-	3.2	3.7(65.)	2180.
2	430.	30.	470.	50.	27.	0.	20.	15.	-	14.0	15.4(68.)	550.
3	490.	55.	580.	40.	25.	0.	12.	8.	-	6.7	7.3(68.)	1090.
4	585.	102.	687.	60.	30.	0.	18.	14.	-	10.8	11.6(69.)	680.
5	725.	69.	794.	20.	20.	0.	-18.	-22.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
540	NWNWNW 30 4S 3W	970	748	1.95	39.	2093.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	20.	150.	50.	27.	0.	12.	10.	-	6.7	7.6(65.)	1090.
2	170.	47.	270.	50.	30.	0.	21.	19.	-	14.0	15.7(66.)	550.
3	313.	15.	328.	50.	25.	0.	25.	27.	-	FRESH	FRESH	FRESH
4	350.	40.	410.	50.	20.	0.	20.	18.	-	13.0	14.1(68.)	585.
5	485.	20.	505.	30.	17.	0.	3.	1.	-	3.8	4.0(70.)	1860.
6	590.	70.	676.	25.	20.	0.	-15.	-17.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
541	NWNWNE 30 4S 3W	0	1068	1.35	200.	2537.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	30.	310.	50.	50.	0.	30.	30.	-	14.0	15.7(66.)	550.
2	310.	65.	378.	37.	37.	0.	35.	35.	-	FRESH	FRESH	FRESH
3	420.	10.	430.	15.	15.	0.	-12.	-6.	-	1.5	1.6(69.)	4400.
4	512.	18.	530.	32.	50.	0.	-22.	-15.	-	1.1	1.2(70.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
542	SWNW 31 4S 3W	0	755	2.12	163.	1780.	1.71

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	210.	26.	236.	100.	60.	0.	-3.	-7.	-	2.6	2.9(67.)	2590.
2	260.	43.	310.	35.	35.	0.	-7.	-13.	-	1.9	1.8(69.)	1460.
3	350.	37.	395.	37.	37.	0.	-16.	-20.	-	1.5	1.6(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
543	SE 31 4S 3W	1018	1172	1.31	50.	1229.	2.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	183.	50.	250.	25.	20.	0.	35.	35.	24.2	34.0	37.5(67.)	238.
2	343.	27.	370.	20.	26.	0.	20.	28.	21.2	10.0	10.5(71.)	750.
3	400.	60.	460.	5.	10.	0.	-20.	-12.	21.2	1.4	1.4(72.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
544	NENESE 32 4S 3W	975	1154	1.57	292.	2702.	1.35

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	40.	410.	30.	22.	0.	6.	10.	-	4.0	4.3(68.)	1760.
2	480.	50.	555.	25.	25.	0.	-10.	-6.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
545	NWSWNE 32 4S 3W	989	1250	1.19	365.	6556.	1.35

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	50.	440.	45.	20.	0.	20.	30.	-	10.0	10.8(69.)	750.
2	490.	25.	515.	40.	13.	0.	15.	26.	-	6.7	7.1(70.)	1090.
3	630.	40.	685.	12.	12.	0.	-16.	-8.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
546	NENWNW 32 4S 3W	981	651	1.76	376.	6218.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	460.	30.	490.	40.	18.	0.	17.	18.	-	8.8	9.5(69.)	850.
2	550.	50.	600.	30.	17.	0.	2.	3.	-	3.2	3.4(70.)	2180.
3	680.	10.	690.	12.	12.	0.	-12.	-12.	-	1.7	1.8(72.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
547	SE 32 4S 3W	960	173	1.51	80.	1406.	1.81

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	95.	15.	110.	70.	70.	0.	14.	20.	26.7	7.7	8.7(65.)	960.
2	155.	52.	207.	55.	55.	0.	20.	25.	28.5	10.8	12.1(66.)	680.
3	288.	30.	325.	60.	60.	0.	16.	21.	27.3	7.7	8.3(69.)	960.
4	410.	30.	440.	15.	15.	0.	-17.	-12.	24.2	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
548	NWSENE 33 4S 3W	970	575	1.63	548.	7418.	1.00

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	600.	63.	663.	30.	30.	0.	13.	15.	-	5.5	5.9(70.)	1300.
2	700.	32.	732.	15.	15.	0.	-9.	-6.	-	2.1	2.2(71.)	3280.
3	780.	30.	810.	10.	10.	0.	-15.	-12.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
549	SESWSE 34 4S 3W	0	176	1.48	54.	4620.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	106.	29.	135.	40.	27.	0.	5.	10.	-	4.0	4.6(65.)	1780.
2	150.	80.	250.	35.	25.	0.	10.	15.	-	5.3	5.0(65.)	1350.
3	320.	38.	390.	33.	21.	0.	10.	15.	-	5.3	5.9(67.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
550	SWSWNE 2 4S 4W	948	1150	1.71	40.	3435.	1.47

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	80.	280.	35.	20.	0.	20.	21.	-	11.8	13.2(66.)	605.
2	380.	50.	430.	22.	15.	0.	7.	8.	-	4.6	5.0(69.)	1540.
3	460.	40.	500.	35.	20.	0.	19.	21.	-	10.8	11.5(70.)	680.
4	580.	20.	600.	5.	13.	0.	-40.	-39.	-	0.7	0.7(72.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
551	NWSWSW 3 4S 4W	874	449	1.97	208.	2963.	0.86

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	25.	285.	35.	17.	0.	10.	8.	-	5.5	6.2(66.)	1300.
2	340.	30.	370.	15.	9.	0.	20.	18.	-	13.0	14.5(66.)	585.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
552	SESESE 3 4S 4W	911	141	1.45	80.	4245.	1.45

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	75.	37.	112.	25.	14.	0.	28.	28.	-	14.0	16.0(65.)	550.
2	160.	20.	290.	20.	17.	0.	23.	29.	-	17.0	19.1(66.)	458.
3	210.	28.	238.	25.	20.	0.	37.	37.	-	FRESH	FRESH	FRESH
4	285.	10.	295.	15.	14.	0.	10.	17.	-	5.3	5.8(68.)	1350.
5	325.	25.	350.	15.	15.	0.	17.	23.	-	8.2	8.9(68.)	900.
6	410.	67.	497.	25.	15.	0.	27.	27.	-	13.0	13.9(69.)	585.
7	540.	20.	560.	18.	18.	0.	3.	9.	-	3.2	3.4(71.)	2180.
8	609.	28.	628.	7.	10.	0.	-13.	-7.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
553	SWSWSE 3 4S 4W	882	1159	0.72	72.	2915.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	167.	20.	195.	25.	20.	0.	18.	38.	-	5.3	6.0(65.)	1350.
2	280.	60.	400.	20.	15.	0.	5.	23.	-	2.6	3.0(66.)	2590.
3	480.	25.	505.	7.	10.	0.	-30.	-12.	-	0.7	0.7(69.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
554	SWSWNE 3 4S 4W	902	654	2.30	95.	2952.	1.37

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	118.	10.	128.	30.	22.	0.	10.	6.	-	6.7	7.6(65.)	1090.
2	222.	14.	236.	15.	21.	0.	17.	13.	-	11.8	13.2(67.)	605.
3	342.	18.	360.	7.	11.	0.	-20.	-25.	-	1.5	1.6(68.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
555	NWNENE 4 4S 4W	880	1050	0.86	144.	3121.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	165.	25.	190.	25.	25.	0.	21.	37.	-	7.7	8.7(66.)	960.
2	275.	25.	300.	8.	10.	0.	-8.	8.	-	1.5	1.7(67.)	4400.
3	383.	45.	430.	7.	10.	0.	-20.	-4.	-	1.1	1.2(69.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
556	SESENE 2 4S 5W	967	260	1.94	63.	3498.	0.76

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	114.	18.	132.	16.	16.	0.	1.	-1.	-	3.2	3.7(64.)	2180.
2	190.	32.	222.	12.	16.	0.	-8.	-10.	-	2.1	2.5(65.)	3280.
3	240.	30.	270.	10.	15.	0.	-12.	-14.	-	1.7	1.9(65.)	3920.
4	310.	16.	326.	7.	10.	0.	-27.	-29.	-	1.0	1.1(66.)	6500.
5	430.	12.	442.	4.	7.	0.	-40.	-43.	-	0.7	0.8(67.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
557	NWNESE 6 5S 1E	0	865	1.87	100.	3586.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	122.	25.	160.	50.	40.	0.	10.	9.	-	5.3	6.0(65.)	1350.
2	208.	10.	218.	35.	22.	0.	-1.	-2.	-	2.6	3.0(66.)	2590.
3	298.	25.	365.	13.	13.	0.	-13.	-14.	-	1.7	1.9(67.)	3920.
4	480.	40.	608.	25.	20.	0.	-7.	-8.	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
558	SESWSE 6 5S 1E	0	854	2.01	115.	3823.	1.22

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	40.	210.	40.	30.	0.	-2.	-5.	-	2.6	3.0(66.)	2590.
2	320.	45.	525.	35.	25.	0.	8.	6.	-	4.9	5.4(67.)	1460.
3	560.	30.	590.	40.	25.	0.	30.	30.	-	FRESH	FRESH	FRESH
4	670.	10.	680.	20.	15.	0.	-10.	-14.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
559	NENWSW 7 5S 1E	0	351	0.80	128.	5555.	0.75

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	47.	390.	40.	15.	0.	20.	37.	-	6.7	7.6(65.)	1090.
2	450.	60.	590.	45.	15.	0.	23.	40.	-	8.2	9.1(67.)	900.
3	645.	30.	750.	10.	10.	0.	-18.	-1.	-	1.1	1.3(68.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
560	SWNENW 18 5S 1E	947	871	1.74	143.	3080.	1.35

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	190.	65.	300.	45.	42.	0.	8.	9.	-	4.6	5.2(66.)	1540.
2	380.	28.	448.	20.	25.	0.	-1.	0.	-	2.6	2.9(69.)	2590.
3	552.	30.	655.	15.	20.	0.	-15.	-14.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
561	SWNENE 18 5S 1E	0	449	1.64	90.	3382.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	90.	290.	60.	22.	0.	-2.	0.	-	2.6	3.0(65.)	2590.
2	330.	22.	400.	40.	30.	0.	2.	5.	-	5.2	5.5(68.)	2180.
3	540.	35.	775.	40.	20.	0.	10.	12.	-	5.3	5.5(70.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
562	NENESW 18 5S 1E	953	1071	1.49	154.	3170.	1.34

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	40.	390.	40.	40.	0.	12.	17.	-	5.5	5.2(66.)	1300.
2	600.	20.	642.	25.	25.	0.	7.	12.	-	4.0	4.2(72.)	1780.
3	730.	45.	830.	20.	20.	0.	-6.	-1.	-	2.1	2.1(73.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
563	SENENW 18 5S 1E	932	471	1.54	130.	2890.	1.44

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	140.	36.	250.	40.	30.	0.	18.	22.	-	8.8	10.0(66.)	850.
2	260.	23.	303.	30.	30.	0.	1.	5.	-	3.2	3.5(68.)	2180.
3	390.	35.	435.	40.	35.	0.	8.	12.	-	4.6	5.0(69.)	1540.
4	445.	30.	490.	30.	35.	0.	1.	5.	-	3.2	3.4(70.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
564	SWSWSW 19 5S 1E	0	457	1.58	105.	3749.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	70.	318.	60.	60.	0.	1.	9.	-	3.2	3.7(65.)	2180.
2	360.	70.	495.	100.	45.	0.	22.	25.	-	14.0	15.4(67.)	550.
3	790.	20.	810.	13.	20.	0.	8.	11.	-	4.6	4.8(72.)	1540.
4	930.	35.	965.	100.	40.	0.	25.	25.	-	13.0	13.2(74.)	585.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
565	SWNESW 19 5S 1E	910	574	1.47	427.	4000.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	680.	35.	715.	45.	45.	0.	7.	12.	-	4.0	4.2(71.)	1780.
2	830.	20.	875.	25.	50.	0.	-17.	-12.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
566	NWSENW 19 5S 1E	926	755	2.01	109.	3727.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	17.	300.	35.	35.	0.	17.	15.	-	10.0	11.3(65.)	750.
2	420.	27.	530.	45.	35.	0.	20.	17.	-	13.0	14.1(69.)	585.
3	660.	20.	770.	45.	45.	0.	17.	15.	-	10.0	10.4(72.)	750.
4	1170.	17.	1187.	100.	45.	0.	10.	9.	-	5.5	5.3(78.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
567	SWSENE 19 5S 1E	0	152	2.11	80.	1752.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	60.	490.	150.	60.	0.	10.	7.	-	5.5	6.0(68.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
568	SWNESE 19 5S 1E	904	1067	1.20	195.	3827.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	60.	330.	60.	60.	0.	5.	15.	-	3.8	4.2(66.)	1860.
2	670.	100.	840.	60.	60.	0.	12.	22.	-	5.3	5.6(70.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
569	SWNWSW 20 5S 1E	854	651	2.73	140.	2113.	1.73

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	60.	210.	100.	45.	0.	10.	4.	-	8.2	9.2(66.)	900.
2	440.	43.	610.	30.	25.	0.	10.	4.	-	8.2	8.6(71.)	900.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
570	SWSWSE 23 5S 1E	0	555	2.06	123.	1951.	1.77

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	70.	320.	100.	52.	0.	-7.	-10.	-	2.5	2.8(67.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
571	SWSENW 23 5S 1E	824	155	1.81	84.	2487.	0.90

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	35.	148.	60.	50.	0.	3.	3.	-	3.8	4.3(64.)	1860.
2	400.	40.	440.	60.	40.	0.	17.	17.	-	8.8	9.7(67.)	850.
3	580.	28.	662.	60.	50.	0.	11.	11.	-	5.5	5.0(69.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
572	NWSESE 29 5S 1E	799	556	1.70	83.	2725.	0.97

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	20.	200.	20.	25.	0.	10.	12.	-	5.3	6.0(65.)	1350.
2	410.	80.	490.	75.	35.	0.	10.	12.	-	5.3	5.8(67.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
573	NENENE 30 5S 1E	0	753	2.33	100.	3495.	1.27

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	45.	300.	50.	45.	0.	6.	1.	-	4.9	5.6(65.)	1460.
2	538.	40.	652.	100.	40.	0.	20.	15.	-	19.0	20.1(70.)	407.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
574	SWNWNE 33 5S 1E	0	955	1.38	68.	2115.	1.73

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	80.	33.	170.	100.	30.	0.	15.	22.	-	7.2	8.2(65.)	1010.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
575	NWNWSE 32 5S 1E	0	559	1.97	150.	5506.	0.88

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	30.	330.	30.	15.	0.	-3.	-5.	-	2.6	3.0(65.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
576	SWSWNW 32 5S 1E	866	1147	1.41	195.	4329.	1.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	80.	330.	75.	35.	0.	10.	15.	-	4.9	5.5(66.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
577	NWNWNW 33 5S 1E	0	367	1.23	192.	2400.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	90.	370.	50.	50.	0.	20.	30.	-	10.0	11.2(66.)	750.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
578	NESENW 1 5S 1W	0	1053	1.25	304.	7098.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	355.	6.	361.	40.	20.	0.	3.	12.	-	3.2	3.5(67.)	2180.
2	490.	17.	507.	35.	20.	0.	-7.	2.	-	2.1	2.2(69.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
579	SWSWSW 1 5S 1W	875	1255	2.10	110.	5046.	1.04

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	32.	277.	30.	30.	0.	18.	15.	-	10.8	12.3(65.)	680.
2	505.	22.	527.	25.	35.	0.	11.	8.	-	5.5	6.0(69.)	1300.
3	565.	38.	603.	14.	22.	0.	-15.	-19.	-	1.5	1.6(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
580	NWSESE 2 5S 1W	896	655	1.93	259.	5903.	1.08

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	345.	20.	520.	40.	25.	0.	15.	14.	-	8.2	9.1(67.)	900.
2	580.	20.	600.	45.	30.	0.	21.	20.	-	17.0	18.2(70.)	458.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
581	SESWNE 2 5S 1W	895	850	1.89	317.	4777.	0.97

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	374.	40.	432.	100.	20.	0.	19.	18.	-	11.8	13.1(67.)	605.
2	514.	30.	575.	25.	20.	0.	-1.	-2.	-	3.2	3.5(69.)	2180.
3	600.	26.	626.	150.	20.	0.	10.	10.	-	5.5	5.9(69.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
582	SESESW 2 5S 1W	900	454	1.54	234.	6510.	0.90

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	310.	70.	485.	45.	30.	0.	19.	23.	-	10.0	11.2(66.)	750.
2	630.	15.	645.	15.	25.	0.	-20.	-17.	-	1.4	1.5(69.)	4850.
3	770.	25.	805.	45.	25.	0.	10.	14.	-	5.3	5.6(70.)	1350.
4	883.	37.	920.	20.	20.	0.	-15.	-11.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
583	SESWNE 3 5S 1W	936	655	1.78	430.	6691.	0.87

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	455.	10.	465.	40.	20.	0.	10.	12.	-	FRESH	FRESH	FRESH
2	555.	6.	561.	30.	16.	0.	-6.	-6.	-	4.4	4.8(68.)	1400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
584	SWSESW 4 5S 1W	879	871	1.14	233.	4973.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	63.	408.	45.	25.	0.	10.	21.	-	4.6	5.1(66.)	1540.
2	505.	10.	515.	8.	8.	0.	-10.	1.	-	1.7	1.8(69.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
585	SWNWSE 4 5S 1W	871	561	1.70	263.	6188.	0.82

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	270.	55.	447.	35.	20.	0.	10.	12.	-	5.3	6.0(66.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
586	SWSESE 5 5S 1W	863	1050	1.46	260.	3753.	1.08

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	285.	60.	520.	25.	20.	0.	-10.	-5.	-	2.1	2.3(67.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
587	NWNESW 5 5S 1W	806	270	0.77	313.	2490.	1.27

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	420.	25.	475.	20.	15.	0.	17.	35.	-	5.3	5.7(69.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
588	SWSWSW 5 5S 1W	0	951	1.98	73.	3728.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	30.	130.	40.	45.	0.	-10.	-8.	-	5.5	6.3(65.)	1300.
2	190.	20.	210.	13.	13.	0.	-18.	-20.	-	1.5	1.7(66.)	4400.
3	520.	75.	600.	14.	14.	0.	-11.	-13.	-	2.1	2.2(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
589	NESWNE 5 5S 1W	851	1276	0.70	310.	4259.	0.95

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	45.	440.	15.	15.	0.	5.	24.	-	2.5	2.8(67.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
590	NWSWNE 5 5S 1W	837	251	1.36	271.	4838.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	340.	35.	410.	10.	15.	0.	-20.	-13.	-	1.4	1.5(68.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
591	SENENW 5 5S 1W	0	150	1.68	116.	4087.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	20.	250.	12.	12.	0.	-8.	-6.	-	2.1	2.3(66.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
592	NWNENW 5 5S 1W	811	1271	1.76	160.	3850.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	10.	210.	20.	20.	0.	-10.	-10.	-	1.7	1.9(66.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
593	NENWSE 6 5S 1W	0	245	1.14	166.	4096.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	180.	20.	222.	30.	30.	0.	17.	29.	-	7.7	8.7(66.)	960.
2	275.	25.	317.	7.	7.	0.	-21.	-10.	-	1.1	1.5(67.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
594	SWSESW 6 5S 1W	0	746	2.44	154.	4220.	0.96

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	60.	368.	35.	25.	0.	20.	15.	-	22.0	25.0(65.)	357.
2	425.	33.	540.	35.	20.	0.	22.	17.	-	FRESH	FRESH	FRESH
3	550.	25.	592.	40.	35.	0.	15.	10.	-	10.8	11.7(69.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
595	SWNENE 6 5S 1W	853	1071	1.47	10.	338.	4.88

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	18.	14.	32.	60.	60.	60.	-12.	-8.	28.5	1.5	1.7(64.)	4400.
2	44.	52.	96.	50.	300.	50.	-11.	-6.	28.5	1.7	1.9(66.)	3920.
3	160.	14.	174.	20.	27.	27.	-9.	-4.	28.5	2.1	2.1(71.)	3280.
4	282.	16.	304.	6.	8.	6.	-35.	-30.	26.7	0.8	0.8(77.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
596	SWSENE 6 5S 1W	0	1045	1.22	132.	3977.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	32.	200.	25.	25.	0.	19.	29.	-	8.8	10.0(65.)	850.
2	250.	50.	300.	8.	8.	0.	-13.	-3.	-	1.5	1.7(66.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
597	NWNENW 6 5S 1W	9	451	1.78	83.	3615.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	120.	50.	232.	25.	20.	0.	13.	13.	-	6.7	7.6(65.)	1090.
2	300.	42.	342.	13.	16.	0.	-20.	-20.	-	1.4	1.5(67.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
598	NWNWSE 7 5S 1W	910	252	1.25	167.	4528.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	60.	338.	45.	25.	0.	21.	30.	-	10.8	12.1(66.)	680.
2	400.	65.	590.	35.	22.	0.	19.	28.	-	8.8	9.5(69.)	850.
3	680.	25.	740.	20.	20.	0.	-10.	-1.	-	1.7	1.7(73.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

599		SESENE 7 5S 1W		868	355	1.76		201.	4216.		1.15	
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	315.	30.	383.	10.	11.	0.	-18.	-17.	-	1.5	1.7(67.)	4400.
2	460.	25.	515.	40.	20.	0.	15.	15.	-	7.7	8.3(69.)	960.
3	650.	75.	725.	13.	13.	0.	-15.	-14.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
600	NESESW 8 5S 1W	811	1254	1.55	200.	4396.	0.74

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	20.	250.	30.	30.	0.	-1.	-5.	-	3.2	3.6(65.)	2180.
2	300.	40.	390.	15.	13.	0.	-10.	-5.	-	2.1	2.3(66.)	3280.
3	425.	35.	483.	35.	30.	0.	18.	22.	-	8.8	9.8(67.)	850.
4	460.	10.	470.	35.	35.	0.	2.	5.	-	3.2	3.6(67.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
601	NESENW 8 5S 1W	0	747	2.11	183.	4421.	1.28

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	35.	310.	20.	13.	0.	-12.	-16.	-	2.1	2.3(67.)	3280.
2	390.	10.	400.	35.	20.	0.	5.	2.	-	4.6	5.0(68.)	1540.
3	528.	22.	550.	13.	13.	0.	-20.	-24.	-	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
602	SESENE 8 5S 1W	812	1251	1.55	101.	4442.	1.61

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	60.	275.	45.	25.	0.	20.	24.	-	11.8	13.4(65.)	605.
2	350.	36.	386.	20.	17.	0.	1.	5.	-	3.2	3.4(69.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
603	SWSESW 9 5S 1W	809	750	1.62	136.	4426.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	35.	270.	40.	40.	0.	20.	23.	-	11.8	13.4(65.)	605.
2	360.	25.	403.	20.	20.	0.	5.	8.	-	4.0	4.4(68.)	1780.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
604	NWNESW 9 5S 1W	0	170	2.04	225.	4596.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	10.	270.	50.	30.	0.	30.	35.	-	FRESH	FRESH	FRESH
2	360.	20.	410.	35.	30.	0.	15.	12.	-	8.2	9.1(67.)	900.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
605	SENWSW 9 5S 1W	806	1170	0.76	157.	4502.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	218.	20.	260.	25.	15.	0.	23.	42.	-	8.2	9.2(66.)	900.
2	340.	40.	380.	17.	15.	0.	20.	38.	-	5.5	5.1(67.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
606	SWSWNE 9 5S 1W	895	266	1.34	266.	7000.	0.85

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	280.	26.	326.	30.	30.	30.	1.	9.	-	8.8	9.9(66.)	700.
2	394.	26.	420.	30.	30.	30.	-10.	-2.	-	1.7	1.9(67.)	3920.
3	525.	14.	540.	7.	9.	8.	-19.	-12.	-	1.4	1.5(68.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
607	SESENW 9 5S 1W	865	1270	1.15	167.	4680.	1.19

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	30.	297.	20.	25.	0.	20.	31.	-	10.0	11.3(66.)	750.
2	370.	40.	410.	12.	15.	0.	-1.	10.	-	2.6	2.9(68.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
608	SWSESW 11 5S 1W	889	749	1.52	209.	3626.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	15.	245.	40.	20.	0.	20.	26.	-	13.0	14.5(66.)	585.
2	490.	60.	600.	20.	20.	0.	-10.	-5.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
609	NESESE 11 5S 1W	0	854	2.04	218.	5519.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	440.	60.	520.	50.	25.	0.	8.	5.	-	4.9	5.4(68.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
610	NENENW 11 5S 1W	910	1254	1.37	230.	5883.	0.72

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	275.	60.	390.	75.	35.	0.	20.	27.	-	10.8	12.2(65.)	680.
2	455.	40.	520.	50.	30.	0.	17.	24.	-	8.2	9.1(67.)	900.

3	585.	30.	670.	20.	20.	0.	-17.	-10.	-	1.5	1.6(68.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
611	NENENE 11 5S 1W	864	654	1.51	211.	5893.	1.08

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	40.	350.	50.	30.	0.	12.	17.	-	FRESH	FRESH	FRESH
2	445.	25.	470.	20.	15.	0.	-1.	4.	-	2.6	2.9(68.)	2590.
3	490.	55.	545.	25.	25.	0.	-12.	-7.	-	1.7	1.8(69.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
612	SWSESE 12 5S 1W	972	454	2.50	93.	5026.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	40.	180.	50.	20.	0.	-3.	-8.	-	3.2	3.6(65.)	2180.
2	190.	35.	250.	50.	23.	0.	10.	5.	-	7.2	8.1(66.)	1010.
3	280.	30.	360.	40.	40.	0.	-3.	-8.	-	3.2	3.6(67.)	2180.
4	380.	50.	430.	75.	37.	0.	13.	8.	-	8.8	9.6(68.)	850.
5	610.	60.	690.	45.	20.	0.	7.	2.	-	5.5	5.8(70.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
613	SESWSE 13 5S 1W	927	149	1.31	306.	4521.	0.76

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	325.	30.	355.	40.	40.	0.	15.	23.	-	7.2	8.1(66.)	1010.
2	372.	53.	545.	75.	30.	0.	21.	29.	-	11.8	13.2(66.)	605.
3	590.	20.	610.	13.	15.	0.	-10.	-2.	-	1.7	1.9(68.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
614	SWNESW 13 5S 1W	924	354	1.59	134.	4566.	0.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	20.	180.	45.	20.	0.	3.	6.	-	3.8	4.3(65.)	1860.
2	225.	40.	280.	55.	50.	0.	11.	14.	-	5.5	6.2(66.)	1300.
3	320.	40.	360.	35.	15.	0.	-2.	1.	-	2.6	3.0(66.)	2590.
4	380.	95.	475.	60.	35.	0.	5.	8.	-	4.0	4.4(67.)	1780.
5	503.	60.	565.	15.	15.	0.	-17.	-14.	-	1.5	1.6(68.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
615	NE 13 5S 1W	0	1260	1.42	100.	3547.	0.66

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	145.	10.	155.	50.	50.	0.	-10.	-6.	-	1.7	2.0(64.)	3920.
2	180.	20.	225.	75.	50.	0.	13.	20.	-	6.7	7.7(65.)	1090.
3	340.	55.	420.	60.	45.	0.	21.	27.	-	11.8	13.3(66.)	605.

4	560.	70.	645.	47.	30.	0.	13.	19.	-	5.5	6.1(67.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
616	SWNENE 13 5S 1W	953	654	1.93	266.	5749.	1.09

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	380.	50.	430.	50.	25.	0.	14.	12.	-	7.2	7.9(68.)	1010.
2	490.	80.	570.	50.	17.	0.	8.	6.	-	4.9	5.3(69.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
617	SESWNW 13 5S 1W	896	355	1.51	134.	3469.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	12.	172.	50.	35.	0.	18.	26.	-	13.0	14.7(65.)	585.
2	300.	15.	330.	40.	30.	0.	7.	12.	-	4.6	5.1(67.)	1540.
3	367.	65.	460.	70.	40.	0.	15.	20.	-	7.2	7.9(68.)	1010.
4	613.	33.	646.	10.	17.	0.	-13.	-8.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
618	NENESE 14 5S 1W	965	554	0.87	117.	4027.	1.15

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	215.	7.	222.	35.	35.	0.	10.	26.	-	4.0	4.5(66.)	1780.
2	337.	75.	442.	40.	30.	0.	8.	24.	-	3.2	3.5(67.)	2180.
3	275.	40.	315.	18.	18.	0.	-10.	5.	-	1.5	1.7(67.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
619	NESESW 14 5S 1W	0	850	0.99	113.	3510.	1.44

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	50.	160.	100.	60.	0.	35.	35.	-	8.8	10.0(65.)	850.
2	230.	50.	280.	75.	60.	0.	28.	29.	-	5.5	6.1(67.)	1300.
3	325.	25.	390.	25.	20.	0.	7.	21.	-	3.8	4.1(68.)	1860.
4	433.	60.	490.	35.	25.	0.	10.	24.	-	4.0	4.3(70.)	1780.
5	512.	50.	603.	15.	20.	0.	-3.	11.	-	2.1	2.2(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
620	NWSENW 14 5S 1W	897	948	1.68	197.	4280.	1.13

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	215.	35.	260.	40.	20.	0.	17.	19.	-	8.8	9.9(66.)	850.
2	340.	75.	570.	25.	22.	0.	-3.	-1.	-	2.6	2.9(67.)	2590.
3	560.	40.	620.	25.	20.	0.	-11.	-9.	-	1.7	1.8(70.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
621	NENESW 15 5S 1W	876	251	1.21	159.	4595.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	18.	228.	35.	30.	0.	17.	28.	-	8.2	9.2(66.)	900.
2	255.	30.	285.	70.	35.	0.	22.	33.	-	13.0	14.5(67.)	585.
3	308.	25.	363.	32.	17.	0.	9.	19.	-	4.6	5.1(67.)	1540.
4	405.	35.	445.	15.	17.	0.	-3.	7.	-	2.5	2.7(69.)	2730.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
622	NENWSE 15 5S 1W	882	656	1.59	90.	4360.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	140.	35.	215.	45.	30.	0.	21.	24.	-	13.0	14.8(65.)	585.
2	280.	28.	340.	25.	20.	0.	10.	13.	-	5.3	5.9(67.)	1350.
3	400.	17.	417.	40.	25.	0.	17.	21.	-	8.8	9.6(68.)	850.
4	550.	80.	630.	10.	10.	0.	-8.	-5.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
623	SWSENE 15 5S 1W	910	556	1.77	101.	4513.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	12.	202.	35.	35.	0.	8.	9.	-	4.9	5.6(65.)	1460.
2	215.	22.	265.	20.	25.	0.	20.	20.	-	11.8	13.3(66.)	605.
3	290.	25.	352.	17.	17.	0.	10.	10.	-	5.3	5.9(67.)	1350.
4	395.	35.	430.	30.	30.	0.	3.	3.	-	3.8	4.1(68.)	1860.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
624	SWSWNW 15 5S 1W	877	1249	1.90	105.	4535.	1.16

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	138.	12.	150.	25.	25.	0.	2.	1.	-	3.8	4.3(65.)	1860.
2	173.	10.	183.	30.	27.	0.	18.	19.	-	13.0	14.7(66.)	585.
3	280.	30.	338.	25.	20.	0.	10.	9.	-	5.3	5.9(67.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
625	NWNWSE 16 5S 1W	858	950	1.40	167.	4537.	1.38

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	240.	50.	330.	40.	40.	0.	27.	27.	-	11.8	13.1(67.)	605.
2	450.	25.	442.	35.	25.	0.	10.	17.	-	4.9	5.2(70.)	1460.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
626	NENESW 16 5S 1W	850	1050	1.85	127.	4481.	1.26

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	85.	330.	60.	50.	0.	27.	27.	-	FRESH	FRESH	FRESH
2	370.	33.	490.	15.	17.	0.	12.	11.	-	5.5	6.0(68.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
627	SWNWNE 16 5S 1W	0	350	1.93	159.	4538.	0.98

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	210.	55.	295.	25.	15.	0.	13.	11.	-	6.7	7.6(66.)	1090.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
628	NWSWNW 16 5S 1W	0	750	1.56	133.	4459.	1.24

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	53.	300.	25.	25.	0.	15.	19.	-	7.2	8.1(65.)	1010.
2	405.	30.	495.	15.	20.	0.	2.	6.	-	3.2	3.5(69.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
629	NENENE 17 5S 1W	0	850	0.88	90.	4501.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	128.	110.	337.	35.	25.	0.	27.	27.	-	4.0	4.6(65.)	1780.
2	380.	45.	475.	30.	15.	0.	17.	33.	-	2.5	6.0(68.)	1300.
3	550.	40.	590.	8.	8.	0.	-13.	3.	-	1.5	1.6(70.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
630	NWNWNE 21 5S 1W	0	950	1.61	136.	4670.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	160.	10.	170.	50.	40.	0.	8.	13.	-	5.3	6.0(66.)	1350.
2	233.	52.	355.	35.	30.	0.	20.	23.	-	11.8	13.2(66.)	605.
3	470.	33.	503.	10.	15.	0.	10.	13.	-	5.3	5.7(69.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
631	NENENE 23 5S 1W	0	255	1.63	252.	3940.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	22.	400.	40.	40.	0.	10.	13.	-	5.3	5.9(67.)	1350.
2	420.	75.	520.	50.	45.	0.	20.	23.	-	11.8	12.8(69.)	605.
3	550.	90.	680.	35.	25.	0.	10.	13.	-	5.3	5.6(70.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
632	SENESE 24 5S 1W	907	356	1.39	100.	3788.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	30.	180.	50.	40.	0.	10.	17.	-	4.9	5.6(65.)	1460.
2	230.	140.	440.	100.	40.	0.	25.	32.	-	22.0	24.6(66.)	357.
3	455.	15.	470.	45.	40.	0.	10.	18.	-	5.3	5.7(69.)	1350.
4	560.	27.	587.	7.	28.	0.	-10.	-3.	-	1.7	1.8(70.)	3920.
5	650.	20.	755.	30.	30.	0.	-2.	5.	-	2.6	2.8(71.)	2590.
6	839.	20.	902.	25.	25.	0.	3.	10.	-	3.2	3.3(73.)	2180.
7	965.	35.	1000.	100.	42.	0.	30.	31.	-	19.0	19.0(75.)	407.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
633	NWNENW 24 5S 1W	0	355	1.74	128.	3861.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	20.	170.	75.	50.	0.	20.	22.	-	14.0	15.8(66.)	550.
2	240.	20.	242.	50.	50.	0.	13.	14.	-	6.7	7.4(67.)	1090.
3	370.	120.	540.	100.	35.	0.	22.	23.	-	14.0	15.2(69.)	550.
4	560.	62.	622.	50.	27.	0.	15.	15.	-	7.7	8.1(71.)	960.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
634	NESENE 24 5S 1W	901	456	1.78	76.	3786.	1.23

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	110.	30.	180.	60.	50.	0.	20.	21.	-	13.0	14.8(65.)	585.
2	230.	132.	465.	110.	40.	0.	32.	32.	-	FRESH	FRESH	FRESH
3	550.	80.	805.	10.	10.	0.	-15.	-15.	-	1.5	1.6(70.)	4400.
4	1020.	10.	1030.	45.	35.	0.	27.	31.	-	FRESH	FRESH	FRESH

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
635	NENENE 25 5S 1W	892	556	1.27	304.	4000.	1.21

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	85.	475.	90.	27.	0.	30.	30.	-	10.8	11.8(68.)	680.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
636	SESENE 26 5S 1W	863	955	1.68	278.	6264.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	290.	30.	320.	50.	45.	0.	25.	27.	-	27.0	30.1(67.)	292.
2	390.	35.	530.	45.	35.	0.	20.	22.	-	11.8	13.0(68.)	605.
3	620.	20.	640.	50.	30.	0.	23.	25.	-	22.0	23.4(70.)	357.
4	800.	60.	860.	50.	35.	0.	13.	15.	-	6.7	7.0(72.)	1090.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
637	NWNWNW 27 5S 1W	843	1052	1.19	263.	5551.	1.14

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	260.	50.	310.	130.	40.	0.	25.	35.	-	19.0	21.2(66.)	407.
2	420.	50.	520.	100.	45.	0.	15.	25.	-	8.7	7.3(68.)	1090.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
638	SENW 36 5S 1W	0	750	2.20	229.	4847.	1.25

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	300.	65.	440.	45.	25.	0.	18.	14.	-	11.8	13.0(67.)	605.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
639	NWNESE 1 5S 2W	825	251	1.91	77.	4959.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	90.	22.	112.	50.	47.	0.	10.	9.	-	5.5	6.3(65.)	1300.
2	230.	38.	268.	40.	15.	0.	13.	12.	-	6.7	7.5(67.)	1090.
3	295.	15.	310.	40.	25.	0.	20.	20.	-	14.0	15.4(68.)	550.
4	340.	25.	365.	45.	25.	0.	20.	19.	-	13.0	14.2(68.)	585.
5	390.	40.	443.	45.	23.	0.	21.	20.	-	14.0	15.1(69.)	550.
6	470.	38.	508.	40.	22.	0.	-2.	-3.	-	2.6	2.8(70.)	2590.
7	550.	10.	560.	25.	20.	0.	-6.	-8.	-	2.5	2.6(71.)	2730.
8	580.	15.	595.	25.	25.	0.	-8.	-10.	-	2.1	2.1(72.)	3280.
9	610.	105.	715.	25.	22.	0.	-9.	-10.	-	2.1	2.1(72.)	3280.
10	717.	23.	740.	20.	20.	0.	-20.	-21.	-	1.4	1.4(74.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
640	SWNESW 1 5S 2W	867	851	1.17	105.	4862.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	20.	200.	20.	26.	0.	17.	28.	-	7.7	8.7(66.)	960.
2	230.	60.	290.	45.	25.	0.	22.	33.	-	11.8	13.2(66.)	605.
3	430.	42.	472.	47.	25.	0.	13.	24.	-	5.5	6.0(69.)	1300.
4	498.	14.	512.	35.	23.	0.	17.	30.	-	8.8	9.4(69.)	850.
5	530.	57.	587.	50.	30.	0.	17.	28.	-	7.2	7.7(70.)	1010.
6	640.	35.	675.	22.	22.	0.	-15.	-9.	-	1.5	1.6(71.)	4400.
7	690.	10.	700.	25.	20.	0.	-10.	-1.	-	1.5	1.6(72.)	4400.
8	797.	66.	863.	25.	25.	0.	-10.	1.	-	1.7	1.7(73.)	3920.
9	865.	72.	937.	23.	23.	0.	-17.	-6.	-	1.5	1.5(74.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
641	SWNWNE 1 5S 2W	878	749	1.80	130.	4356.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	180.	8.	188.	20.	20.	0.	17.	17.	-	8.8	9.9(66.)	850.

2	265.	32.	297.	50.	20.	0.	17.	17.	-	8.8	9.8(67.)	850.
3	330.	17.	347.	35.	30.	0.	23.	24.	-	27.0	29.6(68.)	292.
4	370.	27.	397.	40.	20.	0.	20.	20.	-	11.8	12.9(68.)	605.
5	417.	33.	450.	20.	20.	0.	21.	21.	-	13.0	14.0(69.)	585.
6	495.	30.	532.	8.	8.	0.	-26.	-25.	-	1.1	1.2(70.)	5700.
7	638.	60.	710.	11.	11.	0.	-16.	-15.	-	1.5	1.5(72.)	4400.
8	720.	30.	750.	10.	10.	0.	-21.	-21.	-	1.4	1.4(73.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
642	SWNENW 1 5S 2W	880	849	1.06	120.	4633.	1.18

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	200.	40.	240.	50.	45.	0.	17.	30.	-	7.2	8.1(66.)	1010.
2	370.	110.	540.	45.	20.	0.	20.	33.	-	8.8	9.6(68.)	850.
3	590.	40.	650.	12.	16.	0.	-20.	-7.	-	1.1	1.2(70.)	5700.
4	740.	100.	852.	17.	17.	0.	-16.	-3.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
643	NESENE 2 5S 2W	908	951	1.30	107.	4950.	1.34

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	100.	50.	150.	100.	35.	0.	15.	23.	-	7.2	8.2(65.)	1010.
2	280.	23.	303.	40.	25.	0.	20.	29.	-	10.8	11.9(67.)	680.
3	322.	35.	370.	50.	25.	0.	21.	29.	-	11.8	12.9(68.)	605.
4	430.	80.	580.	50.	25.	0.	20.	28.	-	10.0	10.8(69.)	750.
5	680.	30.	728.	15.	15.	0.	-28.	-20.	-	1.0	1.0(73.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
644	SESESE 2 5S 2W	859	855	2.14	270.	6379.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	312.	45.	317.	50.	50.	0.	10.	6.	-	5.5	6.1(67.)	1300.
2	400.	45.	475.	25.	17.	0.	7.	3.	-	4.9	5.4(68.)	1460.
3	520.	120.	670.	45.	30.	0.	21.	17.	-	17.0	18.3(69.)	458.
4	751.	19.	770.	10.	16.	0.	-18.	-22.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
645	SESENW 4 5S 2W	952	356	1.58	140.	5054.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	173.	24.	197.	35.	30.	0.	-5.	-2.	-	4.4	5.0(65.)	1400.
2	232.	65.	365.	35.	35.	0.	2.	3.	-	8.8	9.9(66.)	700.
3	388.	40.	447.	35.	35.	0.	18.	22.	-	10.0	11.0(68.)	750.
4	455.	28.	483.	35.	20.	0.	5.	9.	-	4.0	4.3(69.)	1780.
5	550.	75.	690.	40.	30.	0.	20.	23.	-	11.8	12.5(70.)	605.
6	772.	30.	850.	35.	27.	0.	10.	13.	-	5.3	5.5(72.)	1350.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
646	4 5S 2W	948	979	1.35	720.	6475.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	840.	30.	870.	18.	13.	0.	7.	15.	-	4.0	4.1(73.)	1780.
2	930.	20.	950.	15.	12.	0.	-10.	-3.	-	1.7	1.7(74.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
647	SENWNE 6 5S 2W	996	277	1.09	612.	5154.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	680.	40.	720.	30.	20.	0.	8.	20.	-	4.0	4.2(71.)	1780.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
648	NWSE 6 5S 2W	0	547	2.07	101.	5520.	1.11

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	120.	460.	35.	25.	0.	-10.	-13.	-	2.8	3.2(65.)	2200.
2	620.	30.	670.	50.	35.	0.	18.	15.	-	10.8	11.4(70.)	680.
3	725.	25.	790.	25.	17.	0.	-8.	-11.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
649	NWSWNW 10 5S 2W	0	647	1.36	105.	5502.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	130.	30.	205.	50.	30.	0.	3.	10.	-	8.8	10.0(65.)	700.
2	255.	90.	470.	50.	30.	0.	20.	27.	-	10.8	12.1(66.)	680.
3	505.	15.	520.	30.	17.	0.	6.	14.	-	4.0	4.3(69.)	1780.
4	610.	55.	670.	70.	30.	0.	22.	29.	-	13.0	13.8(70.)	585.
5	855.	68.	960.	20.	18.	0.	-13.	-6.	-	1.5	1.5(73.)	4400.
6	1043.	115.	1148.	30.	20.	0.	-17.	-10.	-	1.5	1.5(75.)	4400.
7	1170.	40.	1210.	22.	22.	0.	-20.	-13.	-	1.4	1.3(76.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
650	NESENE 11 5S 2W	867	956	1.57	215.	6256.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	30.	303.	50.	35.	0.	20.	24.	-	11.8	13.3(66.)	605.
2	325.	80.	405.	50.	18.	0.	30.	30.	-	FRESH	FRESH	FRESH
3	495.	25.	520.	25.	18.	0.	20.	24.	-	11.8	12.8(69.)	605.
4	597.	23.	620.	35.	18.	0.	20.	24.	-	11.8	12.5(70.)	605.
5	700.	43.	743.	50.	18.	0.	21.	25.	-	13.0	13.7(71.)	585.
6	780.	17.	828.	35.	18.	0.	10.	14.	-	5.3	5.5(72.)	1350.
7	850.	37.	887.	15.	15.	0.	-16.	-14.	-	1.5	1.5(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
651	SENENW 12 5S 2W	855	549	1.60	94.	4009.	1.41

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	30.	310.	25.	22.	0.	20.	23.	-	11.8	13.1(67.)	605.
2	490.	60.	618.	45.	30.	0.	27.	27.	-	19.0	20.1(70.)	407.
3	680.	25.	712.	35.	30.	0.	2.	5.	-	3.2	3.3(73.)	2160.
4	820.	100.	927.	20.	20.	0.	-14.	-11.	-	1.5	1.5(75.)	4400.
5	930.	40.	970.	15.	19.	0.	-20.	-17.	-	1.4	1.3(77.)	4850.
6	980.	10.	990.	10.	15.	0.	-32.	-30.	-	0.8	0.8(77.)	7800.
7	1005.	45.	1050.	3.	7.	0.	-58.	-55.	-	0.4	0.3(78.)	18000.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
652	NENWNE 12 5S 2W	0	854	1.38	154.	4847.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	50.	240.	50.	30.	0.	21.	28.	-	11.8	13.3(66.)	605.
2	340.	20.	360.	25.	13.	0.	17.	24.	-	8.2	9.0(68.)	900.
3	405.	90.	545.	50.	20.	0.	23.	30.	-	14.0	15.1(69.)	550.
4	610.	30.	640.	30.	20.	0.	10.	17.	-	4.9	5.1(72.)	1460.
5	730.	65.	800.	18.	14.	0.	-8.	-1.	-	2.1	2.1(73.)	3280.
6	810.	70.	880.	16.	14.	0.	-13.	-5.	-	1.5	1.5(74.)	4400.
7	890.	10.	900.	8.	12.	0.	-27.	-21.	-	1.0	1.0(75.)	6500.
8	903.	46.	949.	3.	8.	0.	-35.	-28.	-	0.7	0.7(76.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
653	NWSWNE 16 5S 2W	966	966	1.93	86.	2530.	0.77

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	56.	454.	75.	55.	0.	20.	18.	-	13.0	14.5(66.)	585.
2	490.	14.	504.	35.	35.	0.	10.	9.	-	5.5	5.1(67.)	1300.
3	550.	8.	558.	50.	40.	0.	19.	17.	-	10.8	11.8(68.)	640.
4	625.	12.	638.	50.	50.	0.	16.	15.	-	10.0	10.9(68.)	750.
5	770.	30.	824.	35.	35.	0.	12.	10.	-	5.9	5.9(69.)	1300.
6	994.	40.	1050.	24.	32.	0.	-12.	-14.	-	1.7	1.8(71.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
654	NWNW 18 5S 2W	1032	1261	0.71	398.	8784.	1.17

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	540.	25.	565.	50.	40.	0.	43.	45.	-	8.8	9.4(70.)	850.
2	665.	50.	790.	50.	45.	0.	36.	35.	-	4.9	5.1(71.)	1960.
3	920.	25.	1080.	45.	40.	0.	40.	42.	-	6.7	6.8(74.)	1090.
4	1095.	45.	1200.	40.	20.	0.	28.	28.	-	3.2	3.2(76.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
655	NWNWNW 22 5S 2W	968	1157	2.14	180.	6804.	0.62

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	170.	50.	220.	75.	55.	0.	17.	13.	-	10.0	11.5(65.)	750.
2	430.	165.	780.	45.	35.	0.	20.	16.	-	14.0	15.7(66.)	550.
3	800.	78.	908.	45.	35.	0.	17.	13.	-	10.0	10.9(68.)	750.
4	967.	50.	1035.	30.	27.	0.	-3.	-7.	-	2.6	2.8(70.)	2590.
5	1058.	72.	1147.	20.	30.	0.	-10.	-14.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
656	SENW 26 5S 2W	0	1078	1.24	700.	8410.	1.04

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	748.	20.	840.	20.	25.	0.	3.	12.	-	3.2	3.4(71.)	2180.
2	870.	35.	920.	30.	30.	0.	19.	28.	-	8.8	9.1(73.)	850.
3	1055.	50.	1170.	25.	22.	0.	-10.	-1.	-	1.7	1.7(74.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
657	SENE 27 5S 2W	947	1072	2.38	311.	7244.	1.00

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	320.	70.	390.	35.	35.	0.	17.	12.	-	11.8	13.1(67.)	605.
2	410.	75.	520.	100.	40.	0.	10.	5.	-	6.7	7.4(68.)	1090.
3	590.	46.	636.	100.	35.	0.	16.	11.	-	10.8	11.5(69.)	680.
4	675.	20.	725.	23.	17.	0.	3.	-2.	-	4.0	4.2(70.)	1780.

5	835.	45.	880.	40.	25.	0.	10.	5.	-	6.7	7.0(72.)	1090.
6	963.	15.	1012.	17.	16.	0.	-2.	0.	-	4.9	5.0(75.)	1460.
7	1055.	55.	1120.	15.	15.	0.	-11.	-16.	-	2.1	2.1(74.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
658	NWNW 33 5S 2W	913	1050	1.67	770.	12044.	0.93

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	790.	35.	825.	40.	15.	0.	18.	20.	-	10.0	10.5(71.)	750.
2	875.	65.	985.	40.	17.	0.	14.	16.	-	6.7	7.0(72.)	1090.
3	1000.	10.	1010.	25.	13.	0.	-3.	-1.	-	2.6	2.7(73.)	2590.
4	1050.	12.	1067.	25.	13.	0.	-4.	-2.	-	2.5	2.6(75.)	2730.
5	1153.	27.	1180.	12.	15.	0.	-29.	-27.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
659	NENENW 35 5S 2W	945	957	1.64	174.	7454.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	298.	10.	308.	30.	30.	0.	10.	14.	-	5.5	5.1(67.)	1300.
2	370.	22.	396.	19.	36.	0.	16.	19.	-	7.7	8.5(67.)	960.
3	444.	46.	502.	55.	35.	0.	16.	19.	-	8.2	9.0(68.)	900.
4	540.	43.	620.	35.	45.	0.	19.	22.	-	10.8	11.6(69.)	680.
5	670.	60.	726.	35.	20.	0.	10.	13.	-	5.3	5.6(70.)	1350.
6	784.	14.	799.	12.	15.	0.	-7.	-5.	-	2.1	2.1(72.)	3280.
7	826.	36.	862.	60.	23.	0.	18.	21.	-	8.8	9.1(72.)	850.
8	940.	24.	964.	18.	18.	0.	-3.	-0.	-	2.6	2.7(73.)	2590.
9	990.	26.	1016.	13.	13.	0.	-8.	-5.	-	2.1	2.1(74.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
660	NWNESE 1 5S 2W	825	251	1.91	77.	4459.	1.40

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
10	1045.	78.	1128.	20.	15.	0.	-10.	-11.	-	2.1	2.0(78.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
661	SESW 1 5S 3S	1023	561	1.96	405.	7908.	0.66

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	480.	17.	497.	40.	35.	0.	3.	1.	-	3.8	4.2(67.)	1860.
2	530.	42.	605.	45.	25.	0.	2.	0.	-	3.8	4.2(67.)	1860.
3	660.	32.	692.	45.	18.	0.	8.	6.	-	4.9	5.4(68.)	1460.
4	750.	118.	950.	55.	22.	0.	28.	28.	-	FRESH	FRESH	FRESH
5	970.	20.	990.	30.	20.	0.	20.	18.	-	13.0	13.9(70.)	585.
6	1022.	20.	1040.	22.	13.	0.	8.	6.	-	4.9	5.2(70.)	1460.
7	1125.	80.	1230.	35.	19.	0.	-2.	-4.	-	2.6	2.8(71.)	2590.
8	1245.	8.	1253.	25.	13.	0.	-12.	-14.	-	1.7	1.8(72.)	3920.
9	1307.	45.	1352.	3.	8.	0.	-45.	-47.	-	0.5	0.5(72.)	12500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
662	NESW 2 5S 3W	1007	859	1.82	410.	8944.	0.61

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	470.	110.	670.	45.	25.	0.	3.	3.	-	3.8	4.2(66.)	1860.
2	660.	35.	738.	45.	17.	0.	10.	10.	-	5.3	5.8(68.)	1350.
3	760.	145.	580.	45.	22.	0.	16.	16.	-	8.2	8.9(68.)	900.
4	1040.	20.	1060.	45.	15.	0.	22.	22.	-	17.0	18.1(70.)	458.
5	1155.	20.	1175.	40.	14.	0.	20.	20.	-	13.0	13.7(71.)	585.
6	1200.	37.	1237.	45.	15.	0.	10.	10.	-	5.3	5.6(71.)	1350.
7	1250.	70.	1320.	25.	13.	0.	8.	8.	-	4.9	5.1(71.)	1460.
8	1370.	4.	1374.	25.	12.	0.	-10.	-10.	-	2.1	2.1(72.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
663	NWNW 2 5S 3W	999	759	1.96	340.	6935.	0.70

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	380.	42.	422.	50.	16.	0.	8.	8.	-	4.9	5.5(66.)	1460.
2	449.	50.	510.	55.	25.	0.	5.	3.	-	4.0	4.5(67.)	1780.
3	530.	45.	640.	45.	20.	0.	-8.	-10.	-	2.1	2.3(67.)	3280.
4	660.	135.	870.	50.	22.	0.	-8.	-10.	-	2.1	2.2(68.)	3280.
5	910.	120.	1080.	55.	24.	0.	9.	7.	-	5.3	5.7(70.)	1550.
6	1142.	70.	1240.	25.	20.	0.	-10.	-12.	-	2.1	2.1(71.)	3280.
7	1260.	10.	1270.	30.	30.	0.	-18.	-22.	-	1.4	1.4(72.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
664	SESE 2 5S 3W	1059	1159	1.25	537.	7984.	0.58

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	595.	35.	630.	50.	30.	0.	18.	27.	-	8.2	9.1(67.)	900.
2	680.	50.	760.	45.	20.	0.	8.	17.	-	4.0	4.4(67.)	1780.
3	790.	60.	850.	50.	22.	0.	18.	27.	-	8.2	9.0(68.)	900.
4	910.	125.	1130.	50.	18.	0.	40.	40.	-	FRESH	FRESH	FRESH
5	1155.	25.	1200.	25.	15.	0.	30.	30.	-	10.8	11.9(70.)	680.
6	1270.	50.	1370.	20.	14.	0.	10.	19.	-	4.9	5.2(71.)	1460.
7	1390.	20.	1410.	9.	15.	0.	-20.	-11.	-	1.4	1.4(72.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
665	SWNE 2 5S 3W	1002	159	1.79	383.	7490.	1.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	450.	83.	640.	45.	35.	0.	7.	7.	-	4.6	5.0(68.)	1540.
2	655.	45.	700.	50.	30.	0.	10.	10.	-	5.3	5.6(70.)	1350.
3	750.	37.	787.	45.	22.	0.	20.	20.	-	11.8	12.4(71.)	605.
4	850.	50.	900.	55.	24.	0.	35.	35.	-	FRESH	FRESH	FRESH
5	920.	40.	965.	37.	20.	0.	18.	18.	-	10.0	10.2(73.)	750.
6	998.	18.	1015.	22.	22.	0.	25.	25.	-	27.0	27.4(74.)	292.
7	1090.	130.	1220.	25.	23.	0.	8.	8.	-	4.6	4.6(75.)	1540.

8	1230.	17.	1247.	15.	14.	0.	-10.	-10.	-	2.1	2.0(76.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
666	NENE 2 5S 3W	0	371	1.69	356.	5313.	1.10

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	320.	80.	530.	50.	35.	0.	-8.	-6.	-	2.8	3.1(67.)	2200.
2	544.	110.	714.	50.	27.	0.	7.	9.	-	4.6	4.9(69.)	1540.
3	727.	55.	830.	40.	23.	0.	10.	12.	-	5.3	5.5(72.)	1350.
4	890.	95.	1090.	45.	26.	0.	-10.	-8.	-	2.1	2.1(73.)	3280.
5	1130.	10.	1140.	20.	18.	0.	-19.	-19.	-	1.4	1.3(76.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
667	SENENE 3 5S 3W	976	960	1.56	611.	8540.	0.71

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	610.	175.	995.	50.	25.	0.	20.	24.	-	11.8	12.9(68.)	605.
2	997.	18.	1015.	30.	16.	0.	10.	14.	-	5.3	5.6(71.)	1350.
3	1040.	50.	1140.	50.	23.	0.	35.	35.	-	FRESH	FRESH	FRESH
4	1245.	60.	1330.	20.	14.	0.	8.	12.	-	4.6	4.8(72.)	1540.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
668	SENWNW 3 5S 3W	918	459	1.77	365.	8091.	0.57

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	390.	30.	482.	20.	12.	0.	2.	3.	-	3.2	3.6(66.)	2180.
2	515.	115.	680.	45.	32.	0.	16.	19.	-	10.0	11.2(66.)	750.
3	710.	120.	905.	50.	20.	0.	10.	11.	-	5.3	5.8(68.)	1350.
4	925.	100.	1110.	45.	18.	0.	17.	18.	-	8.8	9.5(69.)	850.
5	1150.	10.	1180.	25.	15.	0.	8.	9.	-	4.9	5.2(70.)	1460.
6	1205.	14.	1219.	18.	15.	0.	-9.	-9.	-	2.1	2.2(70.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
669	NESE 3 5S 3W	958	459	2.15	500.	8657.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	565.	60.	723.	50.	45.	0.	12.	8.	-	6.7	7.2(69.)	1090.
2	747.	72.	825.	45.	20.	0.	23.	19.	-	27.0	28.3(71.)	292.
3	930.	60.	990.	50.	22.	0.	13.	9.	-	7.2	7.4(73.)	1010.
4	1000.	20.	1020.	35.	18.	0.	3.	-1.	-	4.0	4.1(74.)	1780.
5	1040.	80.	1243.	50.	20.	0.	22.	18.	-	19.0	19.1(74.)	407.
6	1290.	50.	1400.	13.	13.	0.	-10.	-14.	-	2.1	2.0(77.)	3280.
7	1420.	20.	1450.	20.	18.	0.	-20.	-24.	-	1.5	1.4(78.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
670	SENENE 4 5S 3W	913	1159	1.77	420.	8834.	0.64

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	460.	20.	480.	45.	20.	0.	13.	14.	-	6.7	7.5(66.)	1090.
2	510.	350.	1190.	45.	20.	0.	20.	21.	-	11.8	13.1(67.)	605.
3	1260.	20.	1300.	13.	13.	0.	-7.	-5.	-	2.1	2.1(72.)	3280.
4	1365.	10.	1375.	11.	10.	0.	-23.	-24.	-	1.1	1.2(72.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
671	SESE 4 5S 3S	969	154	1.69	357.	7182.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	400.	50.	650.	30.	25.	0.	10.	12.	-	5.3	5.8(68.)	1350.
2	680.	210.	1170.	35.	25.	0.	20.	22.	-	11.8	12.4(71.)	605.
3	1190.	30.	1300.	30.	25.	0.	-2.	-0.	-	2.6	2.5(76.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
672	SENWNW 4 5S 3W	896	659	1.16	345.	8236.	1.01

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	500.	65.	600.	45.	35.	0.	18.	29.	-	7.7	8.4(69.)	960.
2	650.	175.	1030.	30.	20.	0.	14.	25.	-	5.5	5.9(70.)	1300.
3	1075.	15.	1090.	20.	17.	0.	8.	20.	-	4.0	4.0(74.)	1780.
4	1123.	40.	1220.	20.	17.	0.	-2.	9.	-	2.6	2.7(75.)	2590.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
673	SESWNE 5 5S 3W	892	660	2.30	576.	8536.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	560.	20.	640.	25.	22.	0.	7.	2.	-	5.3	5.7(70.)	1350.
2	673.	110.	890.	40.	30.	0.	13.	8.	-	7.7	8.1(71.)	960.
3	965.	60.	1035.	40.	23.	0.	21.	15.	-	19.0	19.3(74.)	407.
4	1050.	30.	1080.	25.	17.	0.	8.	3.	-	5.5	5.5(75.)	1300.
5	1140.	45.	1200.	20.	17.	0.	-1.	-6.	-	3.2	3.2(76.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
674	NWNW 5 5S 3W	892	860	2.22	516.	8034.	0.57

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	540.	30.	570.	35.	25.	0.	14.	10.	-	8.2	9.1(67.)	900.
2	610.	125.	970.	25.	17.	0.	8.	4.	-	5.3	5.9(67.)	1350.
3	1049.	23.	1063.	20.	15.	0.	6.	2.	-	4.6	4.9(69.)	1540.
4	1100.	50.	1292.	20.	14.	0.	-2.	-6.	-	3.2	3.4(70.)	2180.
5	1220.	45.	1265.	15.	15.	0.	-20.	-25.	-	1.5	1.6(71.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD.	TEMP GRADIENT(F/100FT)

675		SW 6 5S 3W	0	770	1.85		95.	2750.		1.76		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	175.	12.	187.	30.	30.	0.	12.	12.	-	6.7	7.5(67.)	1090.
2	170.	160.	612.	30.	30.	0.	10.	9.	-	5.3	5.9(66.)	1350.
3	658.	35.	715.	30.	30.	0.	17.	16.	-	8.8	8.8(75.)	850.
4	970.	60.	1040.	30.	30.	0.	10.	9.	-	5.3	5.0(81.)	1350.
5	1050.	30.	1090.	18.	17.	0.	-10.	-11.	-	2.1	1.9(82.)	3280.
6	1147.	30.	1190.	6.	10.	0.	-24.	-25.	-	1.1	1.0(84.)	5700.
WELL NUMBER		LOCATION	DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)			
676		NENW 11 5S 3W	1041	560	1.95		500.	9113.		1.07		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	500.	20.	520.	30.	30.	0.	3.	1.	-	3.8	4.1(69.)	1860.
2	650.	75.	770.	50.	50.	0.	18.	16.	-	10.0	10.6(70.)	750.
3	795.	220.	1150.	55.	30.	0.	11.	9.	-	5.5	5.7(72.)	1300.
4	1210.	75.	1335.	45.	25.	0.	16.	14.	-	8.2	8.1(76.)	900.
5	1390.	30.	1420.	15.	15.	0.	-20.	-22.	-	1.5	1.4(78.)	4400.
WELL NUMBER		LOCATION	DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)			
677		SENE 11 5S 3W	1069	1059	2.09		517.	9686.		1.10		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	680.	55.	780.	40.	22.	0.	10.	7.	-	5.5	5.8(71.)	1300.
2	805.	165.	1270.	40.	18.	0.	20.	17.	-	13.0	13.4(72.)	585.
3	1310.	30.	1340.	25.	20.	0.	13.	10.	-	7.2	7.0(78.)	1010.
4	1405.	30.	1435.	7.	11.	0.	-20.	-23.	-	1.5	1.4(79.)	4400.
WELL NUMBER		LOCATION	DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)			
678		NWSE 11 5S 3W	1071	1159	1.37		516.	10015.		0.60		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	600.	35.	657.	35.	20.	0.	5.	12.	-	4.0	4.4(67.)	1780.
2	720.	35.	800.	30.	18.	0.	8.	15.	-	4.6	5.0(68.)	1540.
3	875.	32.	935.	35.	20.	0.	12.	19.	-	5.5	6.0(69.)	1300.
4	1093.	135.	1395.	50.	22.	0.	22.	29.	-	13.0	13.8(70.)	585.
5	1470.	65.	1575.	20.	17.	0.	-20.	-13.	-	1.4	1.4(72.)	4850.
WELL NUMBER		LOCATION	DATUM	DATE	RMF(75 F)		CASING	TD	TEMP GRADIENT(F/100FT)			
679		NESE 12 5S 3W	1014	660	2.05		424.	8350.		1.08		
LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	445.	130.	710.	40.	22.	0.	20.	17.	-	13.0	14.2(68.)	585.
2	630.	95.	990.	35.	23.	0.	20.	17.	-	13.0	13.4(72.)	585.
3	1010.	35.	1140.	25.	15.	0.	3.	0.	-	4.0	4.0(74.)	1780.
4	1195.	75.	1300.	17.	17.	0.	-13.	-16.	-	1.7	1.7(76.)	3920.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
680	SWNW 12 5S 3W	1049	1059	2.29	521.	9506.	0.65

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	620.	95.	830.	40.	22.	0.	18.	13.	-	13.0	14.3(68.)	585.
2	970.	10.	980.	20.	18.	0.	20.	16.	-	19.0	20.3(70.)	407.
3	1040.	50.	1190.	22.	15.	0.	8.	3.	-	5.5	5.8(70.)	1300.
4	1220.	40.	1265.	40.	22.	0.	20.	15.	-	17.0	17.8(71.)	458.
5	1340.	55.	1410.	25.	20.	0.	-18.	-23.	-	1.5	1.6(72.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
681	SESW 12 5S 3W	1042	1259	2.01	507.	9672.	0.48

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	630.	140.	880.	50.	30.	0.	18.	15.	-	10.8	12.0(67.)	680.
2	970.	40.	1035.	40.	20.	0.	16.	14.	-	8.8	9.6(68.)	850.
3	1070.	125.	1315.	35.	23.	0.	9.	6.	-	5.3	5.7(69.)	1350.
4	1380.	27.	1407.	15.	20.	0.	-27.	-30.	-	1.1	1.2(70.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
682	NENE 13 5S 3W	1050	360	2.25	463.	9455.	1.06

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	570.	115.	780.	100.	35.	0.	15.	10.	-	8.8	9.4(70.)	850.
2	800.	65.	880.	45.	25.	0.	18.	13.	-	11.8	12.2(72.)	605.
3	1050.	60.	1150.	35.	19.	0.	17.	12.	-	10.8	10.8(75.)	680.
4	1240.	27.	1267.	25.	22.	0.	13.	8.	-	7.7	7.5(77.)	960.
5	1340.	40.	1380.	18.	18.	0.	-15.	-20.	-	1.7	1.5(78.)	3920.
6	1390.	32.	1422.	20.	20.	0.	-18.	-23.	-	1.5	1.4(78.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
683	SESENW 15 5S 3W	993	452	1.87	264.	7313.	1.33

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	725.	100.	910.	50.	30.	0.	19.	18.	-	10.8	11.0(73.)	680.
2	930.	80.	1170.	50.	35.	0.	15.	14.	-	7.7	7.6(76.)	960.
3	1200.	32.	1232.	100.	35.	0.	20.	20.	-	11.8	11.2(79.)	605.
4	1380.	25.	1420.	30.	20.	0.	-10.	-11.	-	2.1	1.9(82.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
684	SESWSW 17 5S 3W	923	451	1.42	364.	7524.	1.04

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	30.	400.	40.	25.	0.	17.	23.	-	8.2	9.0(67.)	900.

2	550.	10.	560.	18.	18.	0.	-3.	3.	-	2.6	2.9(69.)	2590.
3	705.	60.	800.	35.	18.	0.	10.	16.	-	4.9	5.2(71.)	1460.
4	998.	32.	1030.	50.	20.	0.	17.	23.	-	8.2	8.3(74.)	900.
5	1070.	20.	1090.	15.	17.	0.	3.	9.	-	3.2	3.2(75.)	2180.
6	1110.	35.	1145.	15.	17.	0.	-1.	5.	-	2.6	2.6(75.)	2590.
7	1160.	10.	1170.	15.	13.	0.	-18.	-14.	-	1.4	1.3(76.)	4850.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
685	SESWSW 17 5S 3W	923	1170	2.08	355.	9470.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	370.	25.	395.	10.	25.	25.	18.	15.	-	10.8	11.9(67.)	680.
2	550.	10.	560.	8.	25.	25.	-1.	-4.	-	3.2	3.4(69.)	2180.
3	705.	60.	800.	9.	20.	20.	10.	7.	-	5.5	5.8(71.)	1300.
4	998.	32.	1030.	20.	21.	21.	15.	12.	-	8.2	8.3(74.)	900.
5	1065.	25.	1090.	19.	19.	19.	-1.	-4.	-	3.2	3.2(74.)	2180.
6	1103.	37.	1140.	18.	18.	18.	-1.	-4.	-	3.2	3.2(75.)	2180.
7	1160.	10.	1170.	12.	12.	12.	-17.	-21.	-	1.5	1.5(75.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
686	SWSW 18 5S 3W	867	1173	2.12	484.	9025.	1.12

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	490.	45.	535.	32.	42.	0.	20.	17.	-	14.0	15.1(69.)	550.
2	600.	50.	725.	30.	30.	0.	20.	15.	-	14.0	14.9(70.)	550.
3	930.	65.	1015.	25.	26.	0.	17.	13.	-	10.0	10.1(74.)	750.
4	1025.	15.	1040.	10.	15.	0.	-15.	-19.	-	1.5	1.5(75.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
687	NWNW 27 5S 3W	918	1162	0.79	510.	10025.	0.96

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	520.	70.	670.	35.	35.	0.	22.	39.	-	7.2	7.8(69.)	1010.
2	700.	110.	895.	100.	45.	0.	30.	30.	-	4.0	4.2(70.)	1780.
3	935.	110.	1140.	18.	13.	0.	20.	37.	-	5.5	5.7(73.)	1300.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
688	NESW 30 5S 3W	890	760	1.43	504.	8996.	0.66

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	565.	90.	700.	45.	35.	0.	20.	25.	-	10.8	11.9(67.)	680.
2	750.	30.	780.	18.	13.	0.	8.	14.	-	4.6	5.0(68.)	1540.
3	920.	20.	940.	19.	13.	0.	7.	13.	-	4.0	4.3(70.)	1780.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
689	SENE 31 5S 3W	843	871	0.79	580.	9392.	1.03

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	660.	40.	730.	10.	10.	0.	17.	34.	-	5.3	5.6(70.)	1350.
2	780.	30.	810.	18.	18.	0.	30.	30.	-	4.0	4.2(72.)	1780.
3	850.	25.	910.	8.	8.	0.	9.	25.	-	3.2	3.3(72.)	2180.
4	970.	40.	1010.	3.	5.	0.	-10.	7.	-	1.5	1.5(73.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
690	NESE 32 5S 3W	885	562	1.97	538.	8812.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	540.	50.	590.	30.	15.	0.	3.	1.	-	3.8	4.0(69.)	1860.
2	605.	35.	653.	25.	20.	0.	10.	8.	-	5.5	5.9(70.)	1300.
3	770.	40.	820.	15.	13.	0.	-7.	-9.	-	2.5	2.5(72.)	2730.
4	880.	15.	895.	25.	17.	0.	5.	3.	-	4.0	4.1(73.)	1780.
5	960.	70.	1030.	20.	15.	0.	-10.	-12.	-	2.1	2.1(74.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
691	SWNE 32 5S 3W	876	760	2.38	500.	9325.	0.67

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	593.	70.	675.	50.	21.	0.	1.	-4.	-	4.0	4.4(67.)	1780.
2	730.	20.	750.	15.	13.	0.	-2.	-7.	-	3.2	3.5(68.)	2180.
3	910.	55.	980.	15.	15.	0.	-3.	-8.	-	3.2	3.4(70.)	2180.
4	1005.	23.	1028.	10.	13.	0.	-28.	-33.	-	1.1	1.2(70.)	5700.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
692	NESW 33 5S 3W	939	1261	1.76	514.	9594.	0.54

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	570.	55.	825.	25.	25.	0.	10.	11.	-	5.3	5.9(67.)	1350.
2	872.	23.	895.	10.	10.	0.	-2.	-1.	-	2.6	2.9(68.)	2590.
3	980.	15.	995.	15.	10.	0.	3.	4.	-	3.8	4.1(69.)	1860.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
693	SENE 1 5S 4W	877	660	1.17	806.	8599.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	852.	25.	877.	25.	15.	0.	13.	24.	-	5.5	5.7(72.)	1300.
2	960.	110.	1070.	35.	18.	0.	16.	27.	-	6.7	6.8(74.)	1090.
3	1125.	17.	1142.	11.	11.	0.	5.	16.	-	3.8	3.7(75.)	1860.
4	1180.	15.	1195.	20.	15.	0.	1.	12.	-	2.6	2.5(76.)	2590.
5	1235.	55.	1290.	7.	8.	0.	-30.	-19.	-	0.8	0.8(76.)	7800.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
694	NWNWNW 1 5S 4W	823	172	1.48	110.	2749.	1.29

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	234.	24.	258.	18.	18.	0.	13.	18.	-	5.5	6.1(67.)	1300.
2	440.	34.	474.	20.	20.	0.	13.	18.	-	5.5	5.9(69.)	1300.
3	502.	18.	520.	18.	17.	0.	20.	25.	-	11.8	12.6(70.)	605.
4	532.	24.	556.	13.	13.	0.	20.	25.	-	10.8	11.4(70.)	680.
5	634.	20.	654.	20.	20.	0.	20.	25.	-	10.8	11.3(72.)	680.
6	666.	42.	708.	20.	17.	0.	23.	29.	-	17.0	17.6(72.)	458.
7	886.	22.	908.	17.	17.	0.	2.	7.	-	3.2	3.2(75.)	2180.
8	924.	26.	950.	18.	18.	0.	2.	7.	-	3.2	3.2(75.)	2180.
9	1014.	22.	1036.	13.	13.	0.	-17.	-12.	-	1.5	1.5(77.)	4400.
10	1058.	8.	1066.	6.	8.	0.	-30.	-25.	-	1.0	1.0(77.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
695	SESE 3 5S 4W	830	874	1.83	515.	8475.	1.02

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	544.	60.	604.	20.	23.	0.	7.	7.	-	4.6	5.0(69.)	1540.
2	620.	36.	656.	25.	30.	0.	13.	13.	-	6.7	7.2(70.)	1090.
3	650.	17.	667.	20.	20.	0.	10.	10.	-	5.3	5.6(70.)	1350.
4	770.	22.	792.	18.	20.	0.	-1.	-1.	-	2.6	2.8(71.)	2590.
5	868.	27.	895.	10.	14.	0.	-10.	-10.	-	2.1	2.1(72.)	3280.
6	942.	15.	957.	7.	9.	0.	-13.	-14.	-	1.7	1.7(73.)	3920.
7	1048.	13.	1061.	5.	10.	0.	-30.	-31.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
696	SENW 11 5S 4W	826	574	1.46	503.	8666.	1.04

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	575.	80.	655.	30.	30.	0.	18.	23.	-	8.8	9.4(70.)	850.
2	850.	25.	875.	13.	22.	0.	2.	7.	-	3.2	3.3(72.)	2180.
3	920.	32.	952.	13.	20.	0.	2.	7.	-	3.2	3.3(73.)	2180.
4	1030.	20.	1050.	6.	10.	0.	-27.	-22.	-	1.0	1.0(74.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
697	NWNW 13 5S 4W	832	674	1.64	425.	8555.	1.07

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	480.	18.	498.	30.	30.	0.	10.	10.	-	5.3	5.7(69.)	1350.
2	593.	32.	617.	17.	15.	0.	17.	17.	-	8.8	9.4(70.)	850.
3	785.	28.	813.	18.	20.	0.	27.	27.	-	FRESH	FRESH	FRESH
4	894.	26.	920.	13.	13.	0.	10.	10.	-	5.3	5.4(73.)	1350.
5	1048.	13.	1061.	5.	9.	0.	-30.	-31.	-	1.0	1.0(75.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
698	NWNE 14 5S 4W	825	1273	1.62	615.	8070.	0.87

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	660.	20.	680.	25.	22.	0.	10.	13.	-	5.3	5.7(69.)	1350.
2	700.	18.	718.	22.	22.	0.	7.	10.	-	4.6	4.9(70.)	1540.
3	770.	28.	798.	13.	22.	0.	7.	10.	-	4.0	4.2(70.)	1780.
4	840.	56.	896.	12.	18.	0.	-10.	-7.	-	2.1	2.2(71.)	3280.
5	920.	47.	967.	13.	22.	0.	-17.	-14.	-	1.5	1.5(72.)	4400.
6	930.	18.	948.	5.	10.	0.	-36.	-33.	-	0.7	0.7(72.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
699	NESW 16 5S 4W	892	1160	2.09	313.	7625.	0.74

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	490.	17.	507.	30.	30.	0.	13.	10.	-	7.2	8.0(67.)	1010.
2	585.	13.	598.	35.	35.	0.	20.	18.	-	17.0	18.6(68.)	458.
3	610.	7.	617.	35.	25.	0.	10.	7.	-	5.5	6.0(68.)	1300.
4	635.	30.	665.	20.	20.	0.	10.	7.	-	5.5	5.0(68.)	1300.
5	740.	20.	760.	8.	15.	0.	-20.	-23.	-	1.5	1.6(69.)	4400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
700	NWNWSW 17 5S 4W	865	1057	1.44	330.	4356.	1.64

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	454.	32.	486.	25.	20.	0.	20.	25.	-	10.8	11.4(71.)	680.
2	530.	46.	576.	20.	15.	0.	10.	15.	-	4.9	5.1(72.)	1460.
3	588.	32.	620.	13.	13.	0.	-7.	-1.	-	2.1	2.1(73.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
701	NENW 25 5S 4W	865	361	0.49	537.	8615.	0.63

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	590.	60.	650.	30.	15.	0.	33.	33.	-	2.5	2.8(67.)	2730.
2	730.	65.	795.	20.	13.	0.	40.	40.	-	3.2	3.5(68.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
702	NENE 25 5S 4W	884	160	1.97	533.	8873.	0.60

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	583.	20.	603.	35.	30.	0.	10.	8.	-	5.5	6.1(67.)	1300.
2	640.	5.	645.	25.	18.	0.	1.	-1.	-	3.2	3.5(67.)	2180.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
703	SWNE 25 5S 4W	900	1060	2.21	544.	9210.	0.87

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS

1	580.	10.	590.	25.	20.	0.	7.	3.	-	5.3	5.8(69.)	1350.
2	620.	70.	690.	35.	30.	0.	7.	3.	-	4.9	5.3(69.)	1460.
3	710.	18.	728.	20.	17.	0.	-7.	-11.	-	2.5	2.7(70.)	2730.
4	842.	15.	857.	13.	12.	0.	-10.	-14.	-	2.1	2.2(71.)	3280.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
704	SESENW 3 5S 6W	889	452	1.43	150.	5466.	1.05

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	230.	20.	250.	20.	15.	0.	-27.	-21.	-	1.0	1.1(66.)	6500.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
705	NWNWNW 24 5S 6W	0	457	1.91	26.	2698.	1.20

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	150.	12.	162.	3.	6.	0.	-37.	-40.	-	0.7	0.8(65.)	9400.

WELL NUMBER	LOCATION	DATUM	DATE	RMF(75 F)	CASING	TD	TEMP GRADIENT(F/100FT)
706	25 5S 6W	876	747	1.62	51.	2459.	1.00

LABEL NO	FORM TOP	THICK	BOTTOM	R DEEP	R SHAL	R MED	SP	SP(COR)	POROSITY	RW(75)	RWFORM(TEMP F)	TDS
1	220.	12.	232.	25.	25.	0.	20.	24.	-	14.0	15.8(66.)	550.
2	270.	35.	305.	15.	20.	0.	10.	13.	-	5.3	5.9(66.)	1350.
3	325.	27.	352.	13.	15.	0.	3.	6.	-	3.8	4.2(67.)	1860.
4	360.	30.	390.	15.	17.	0.	3.	5.	-	3.8	4.2(67.)	1860.

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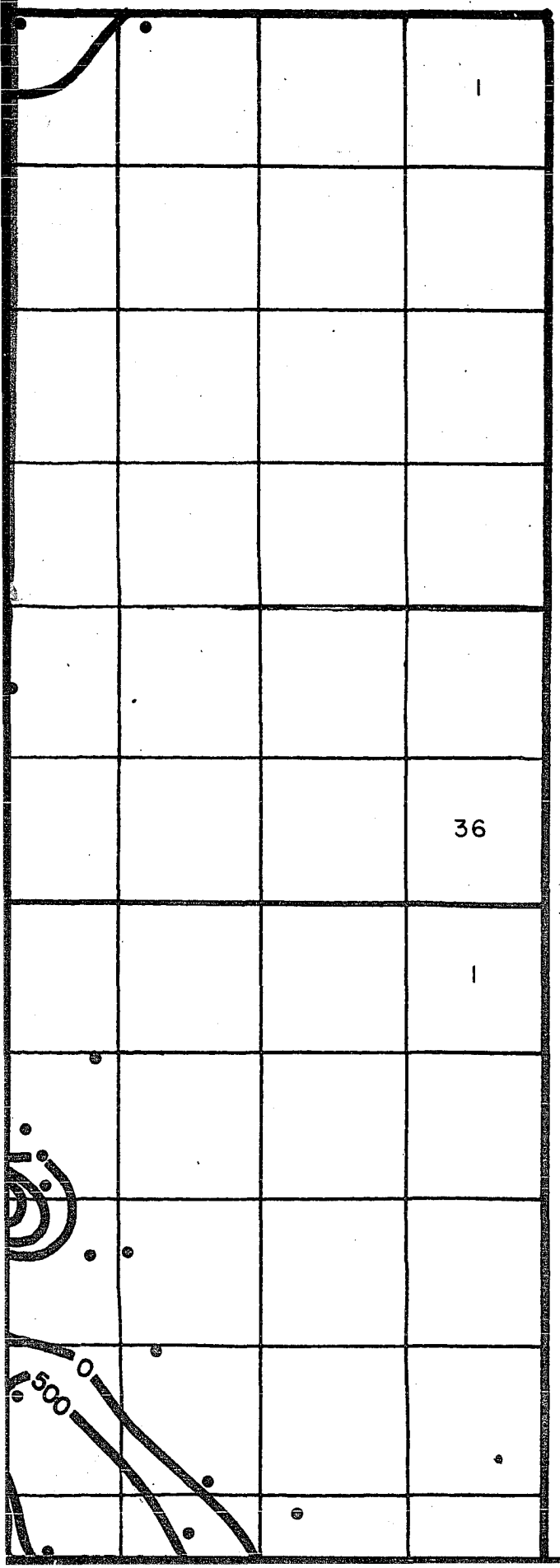

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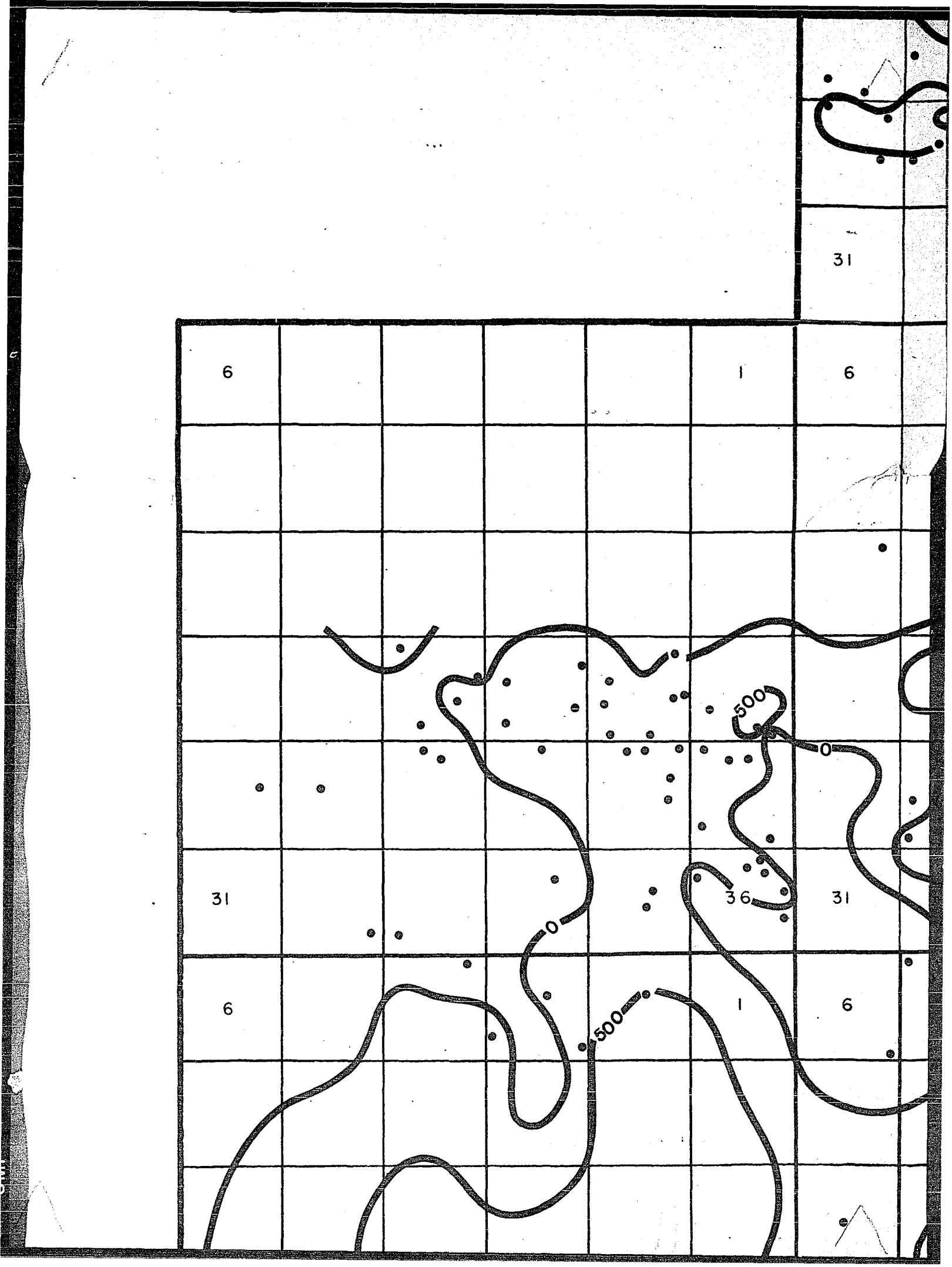
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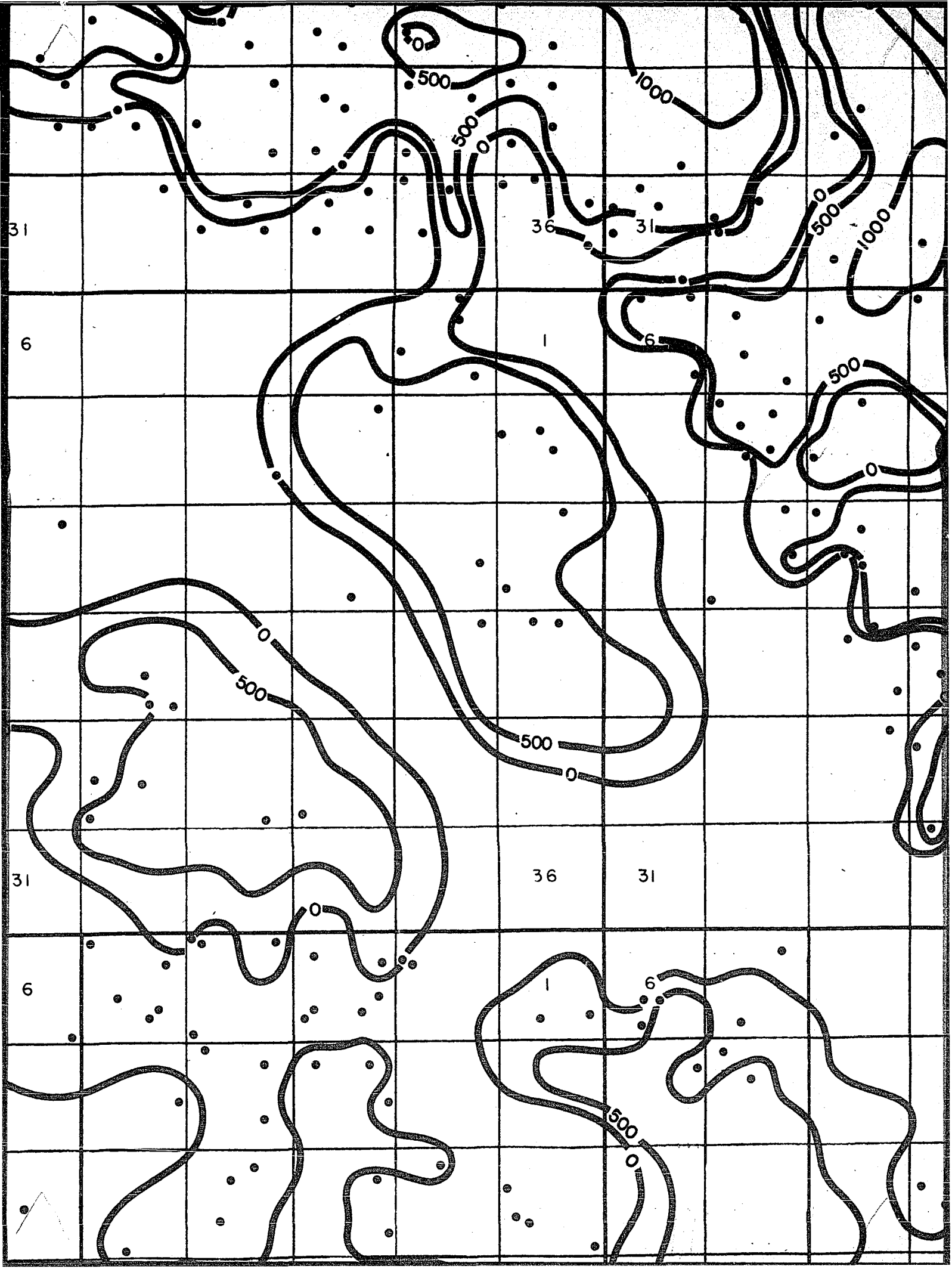
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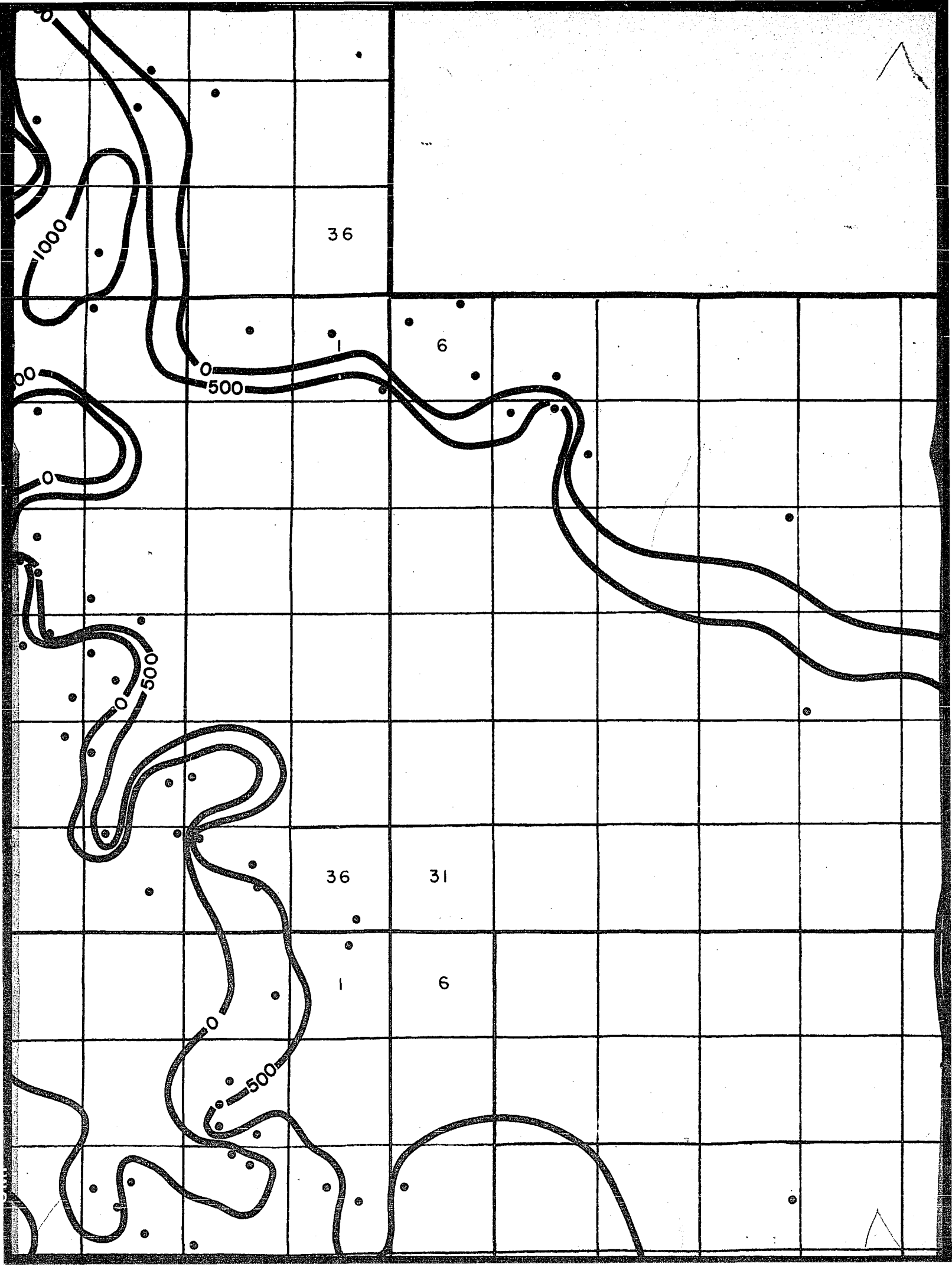
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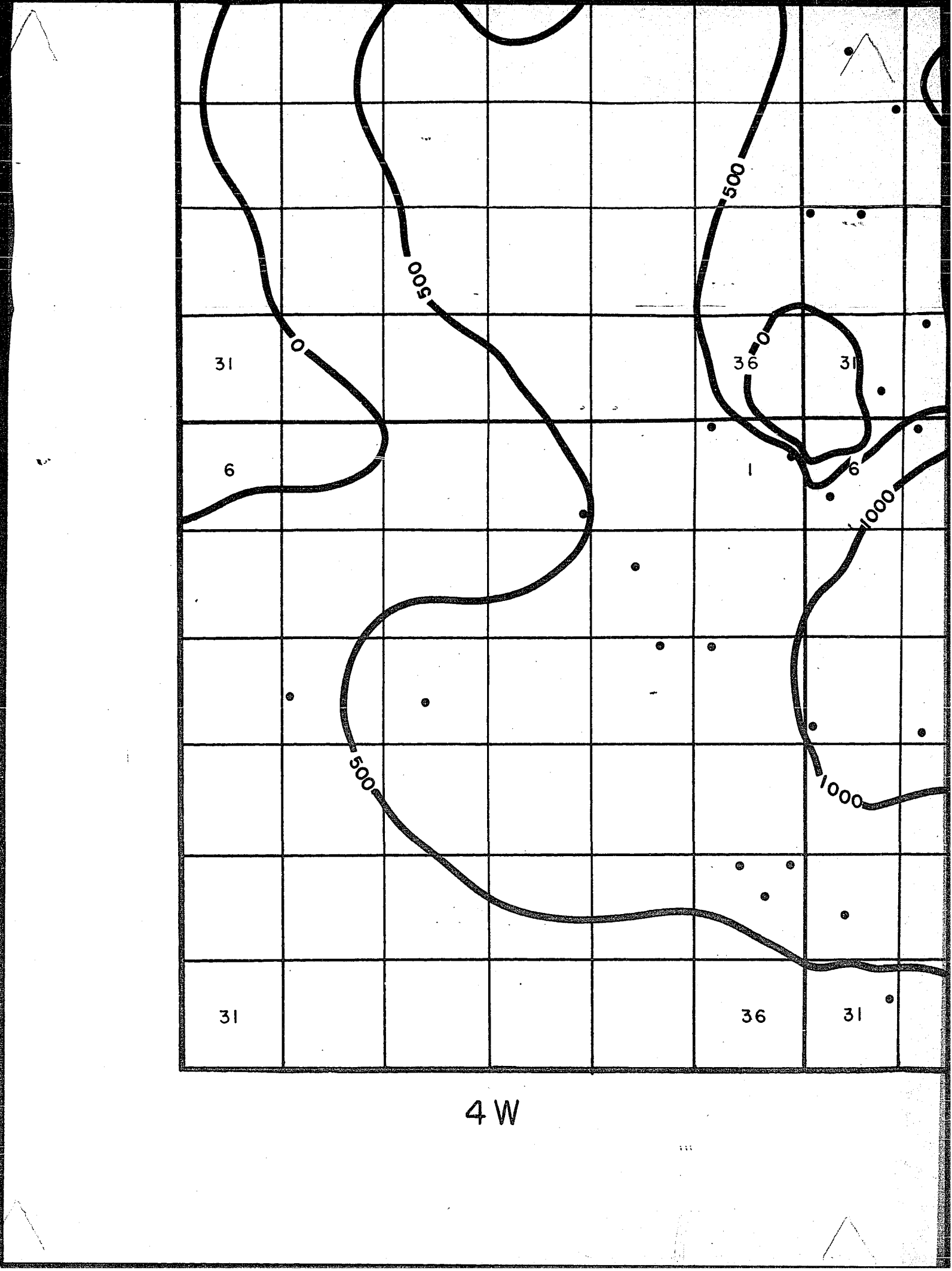

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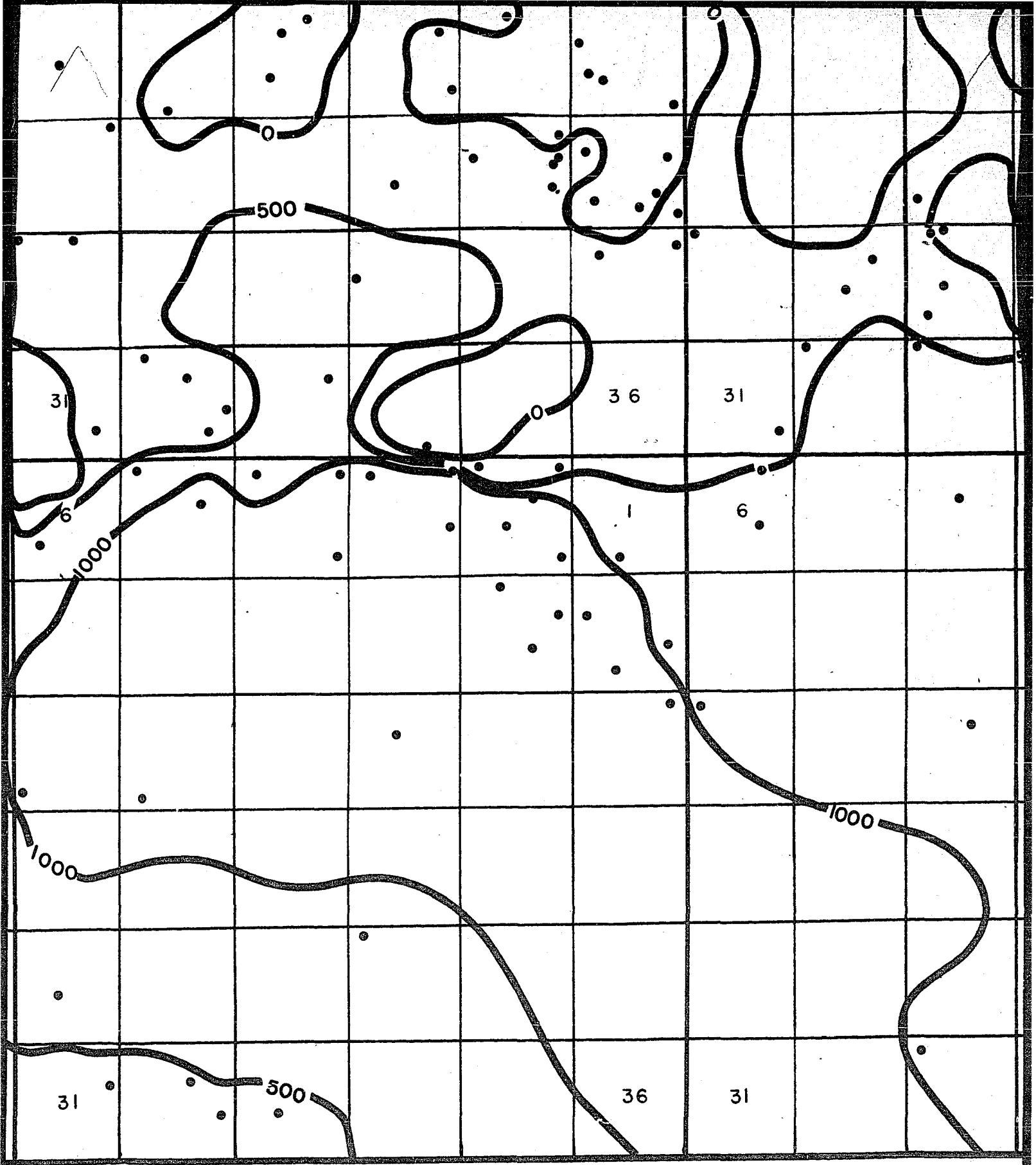

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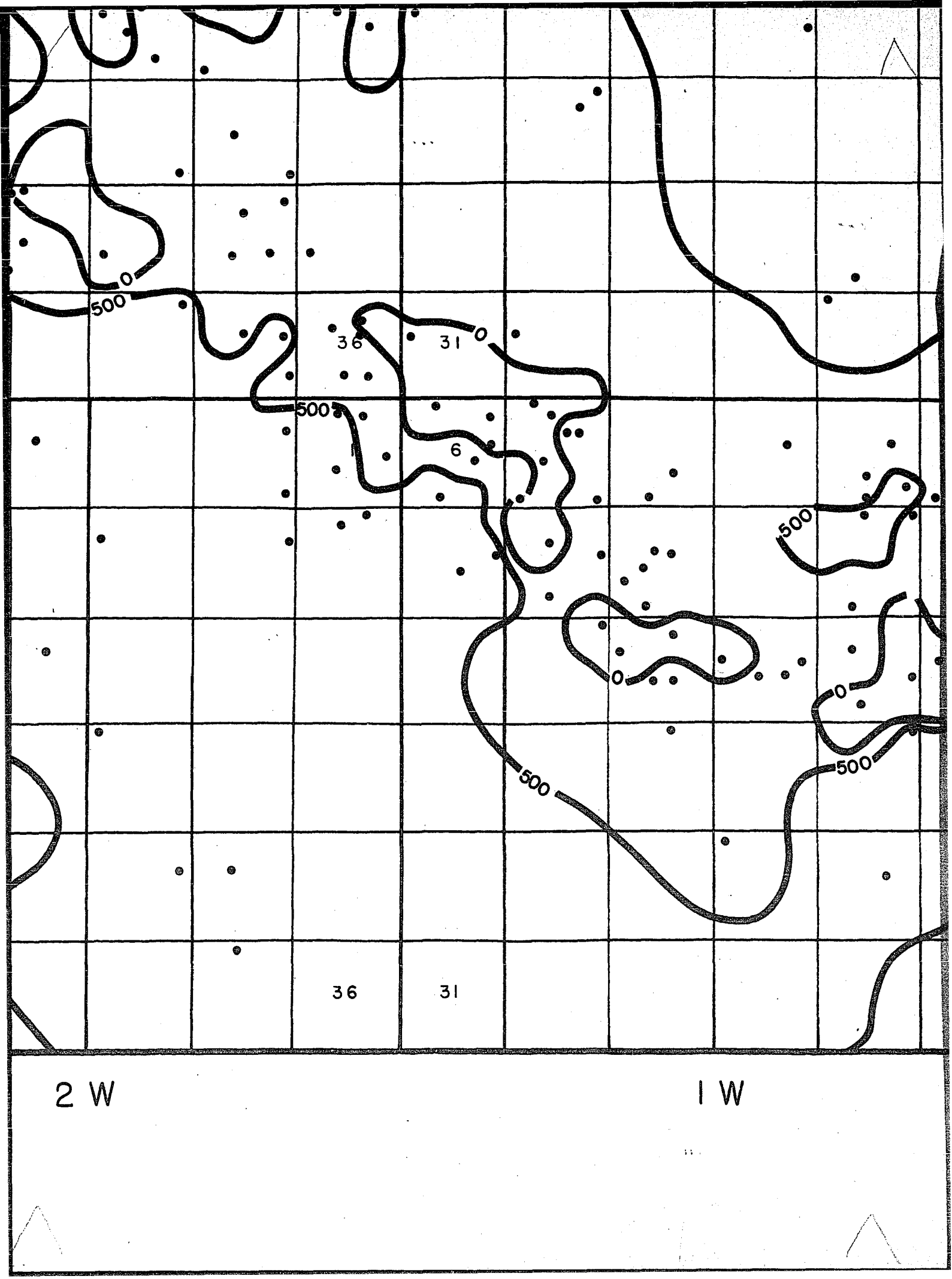
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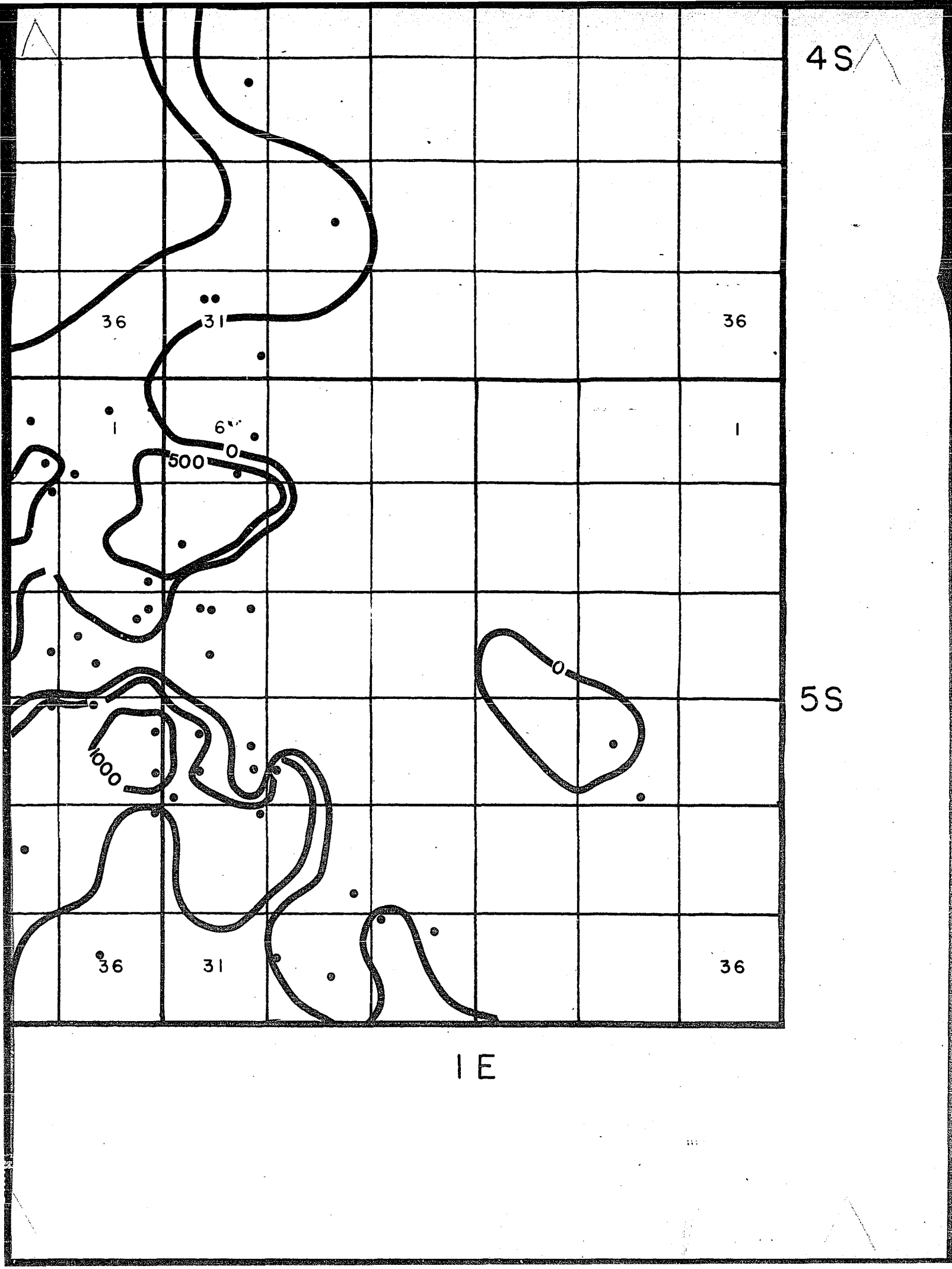
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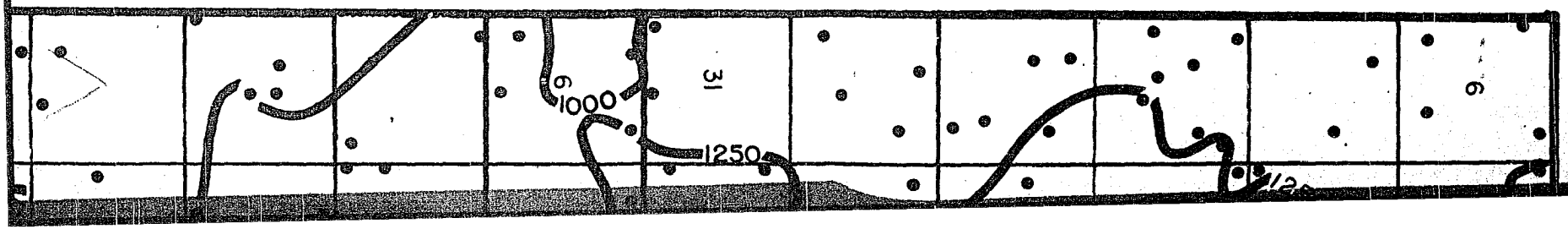
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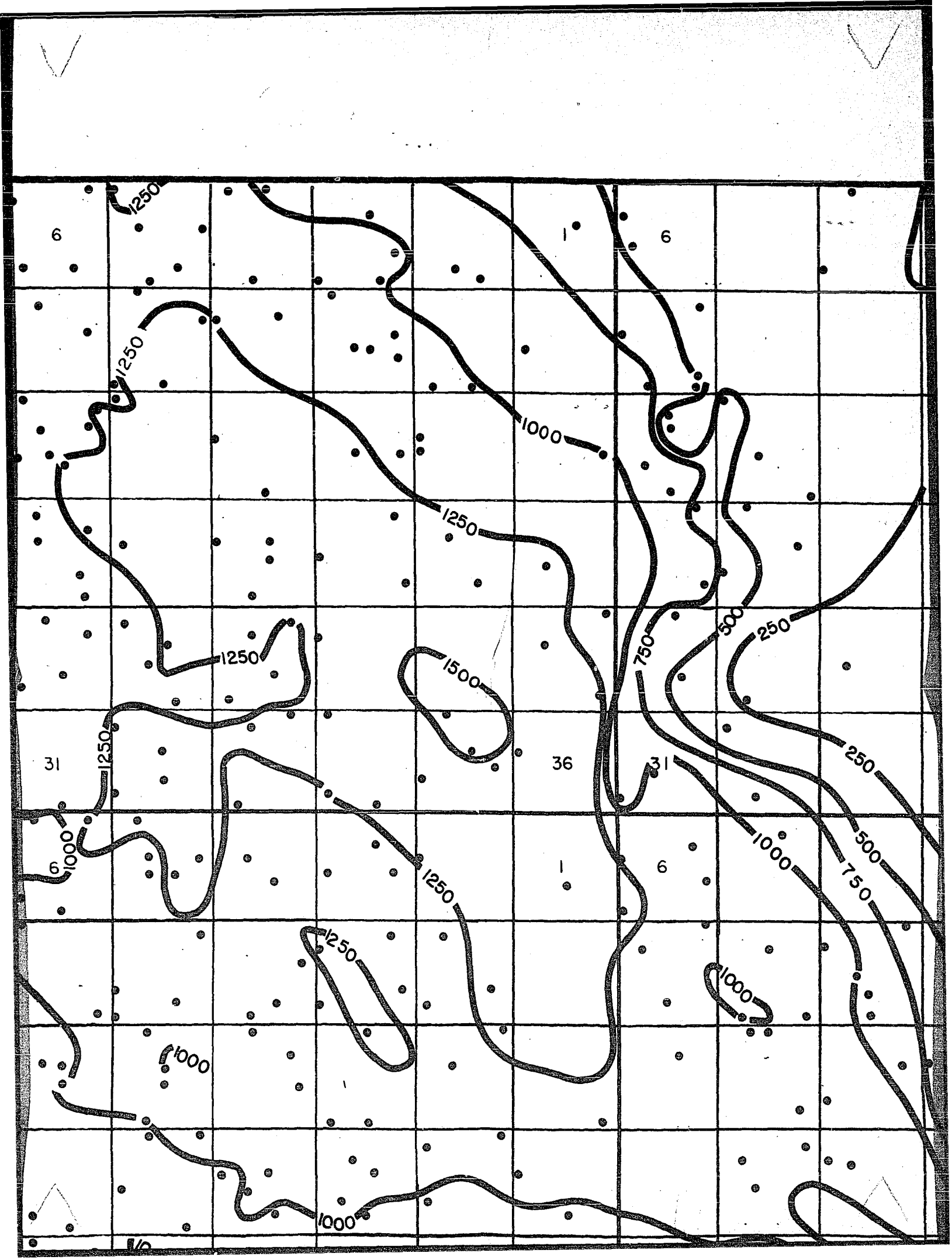
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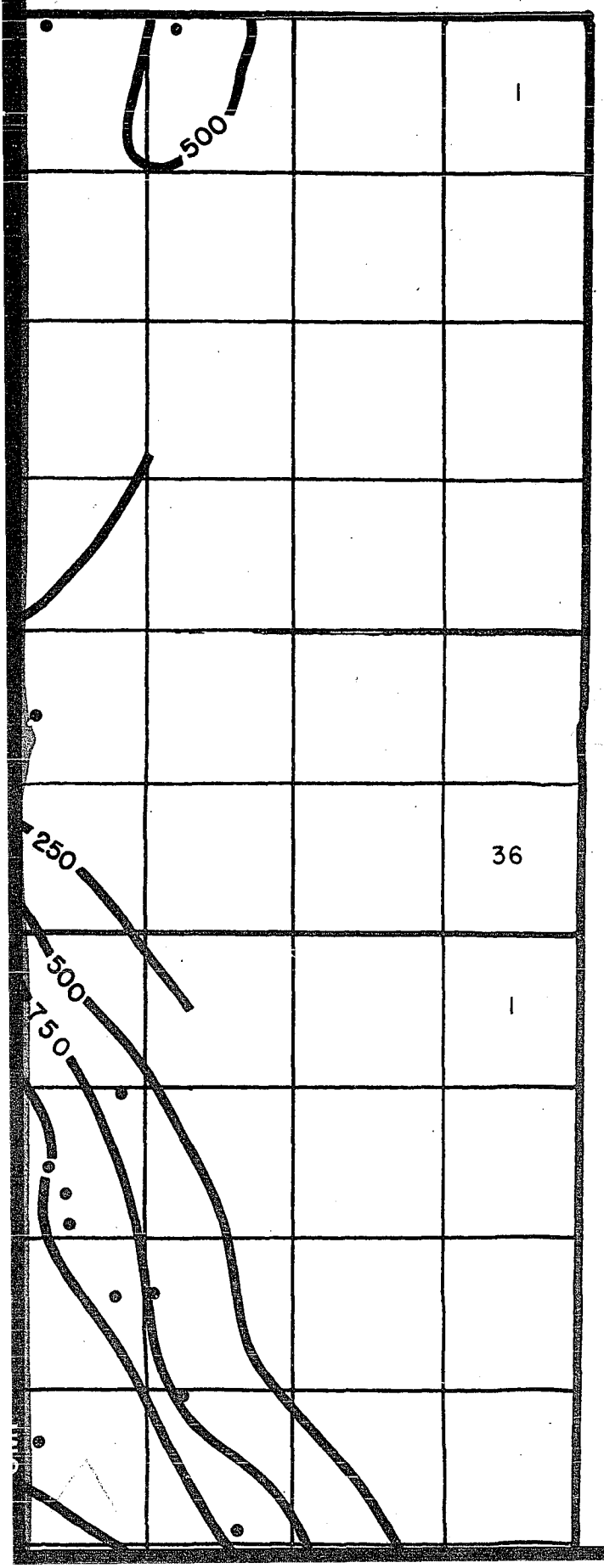

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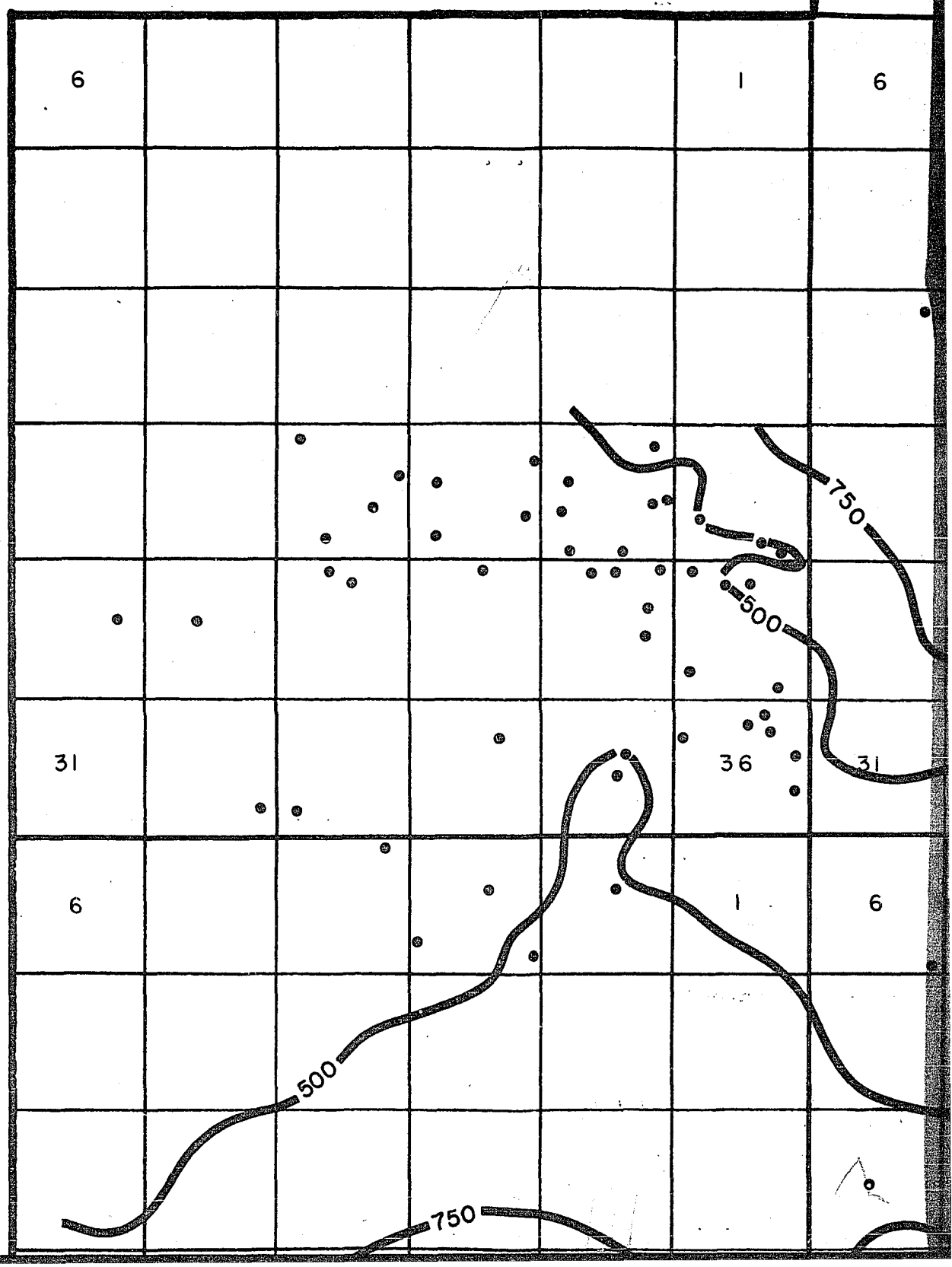
CARY L. McCONNELL
1981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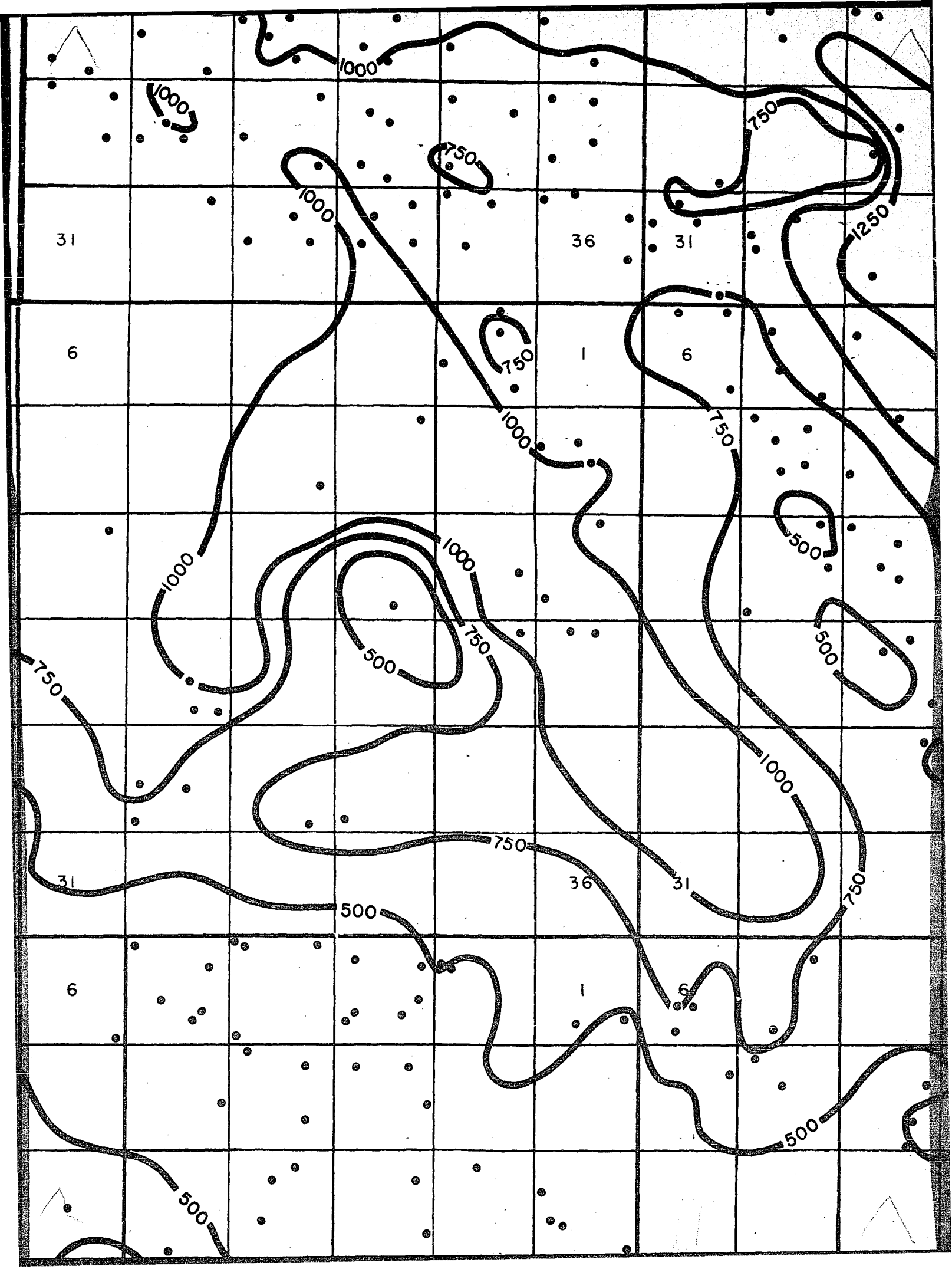
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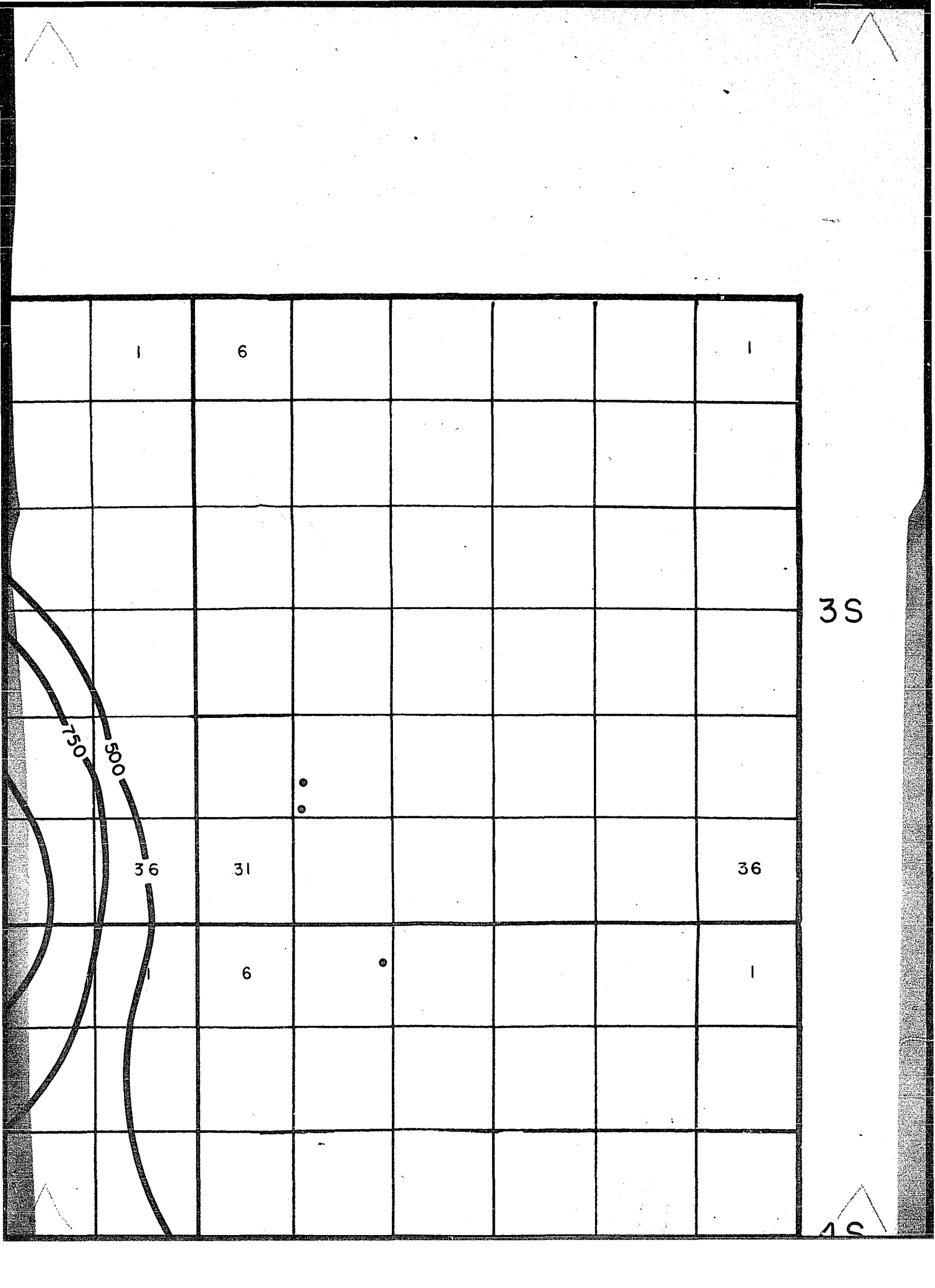
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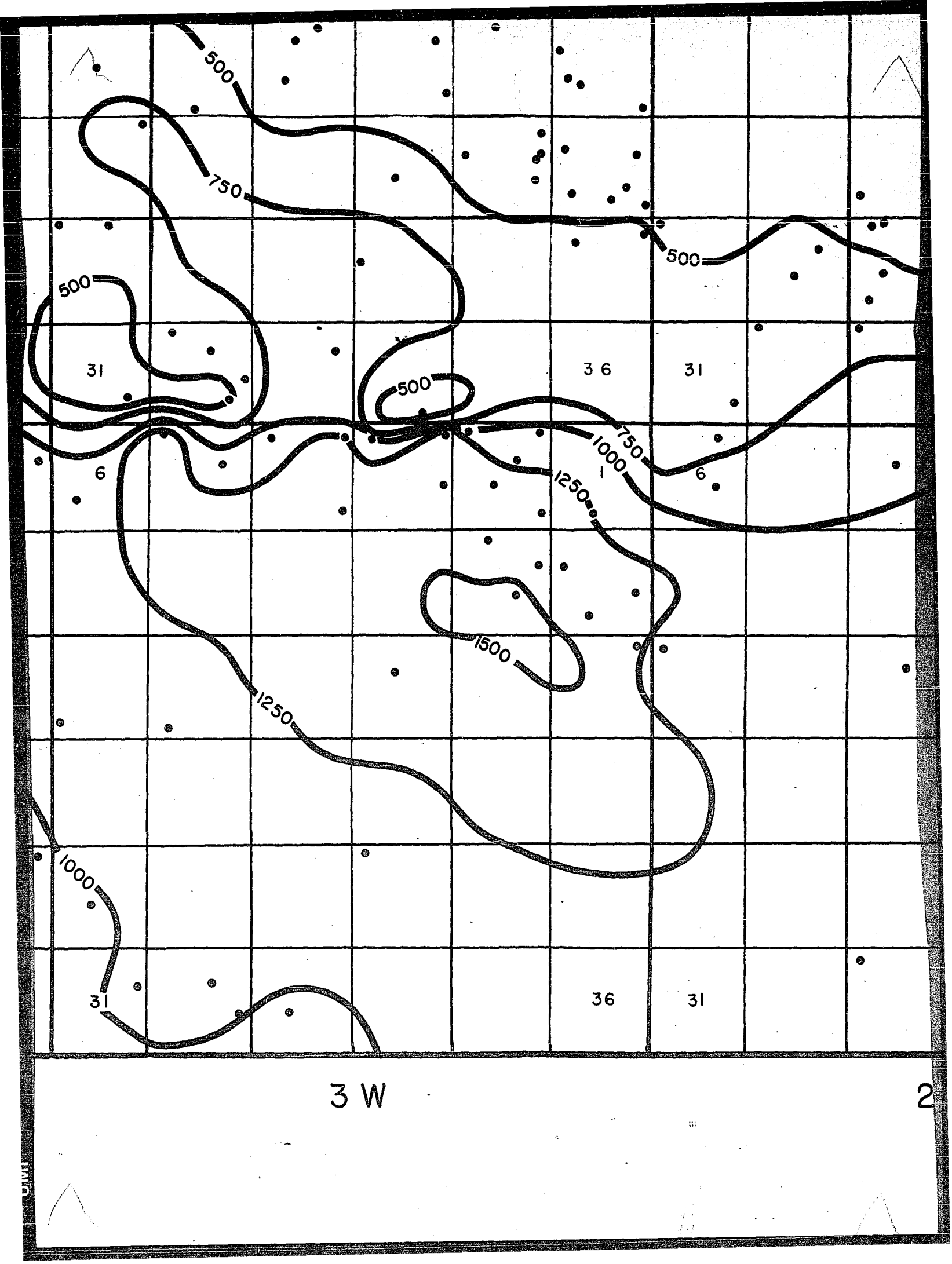
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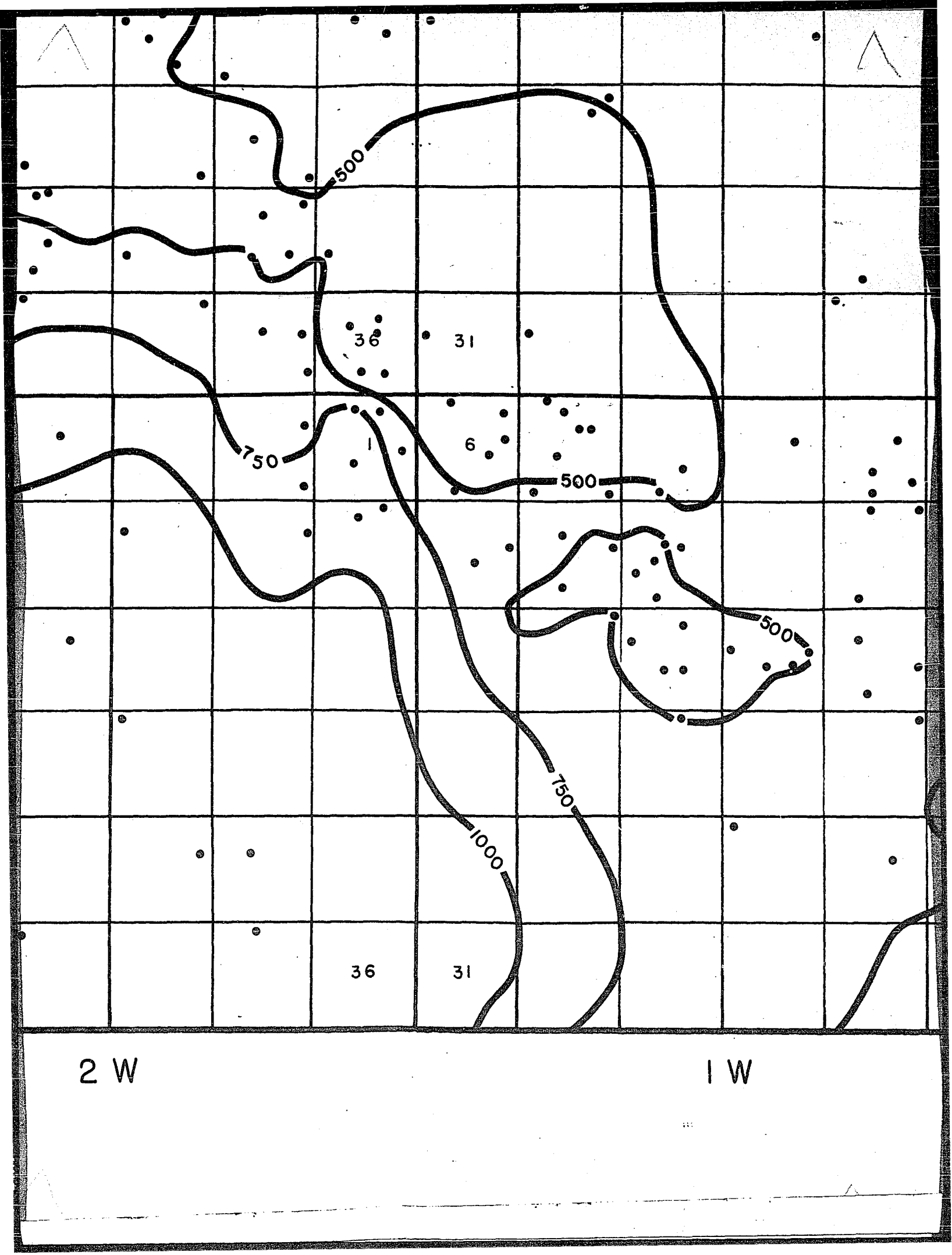
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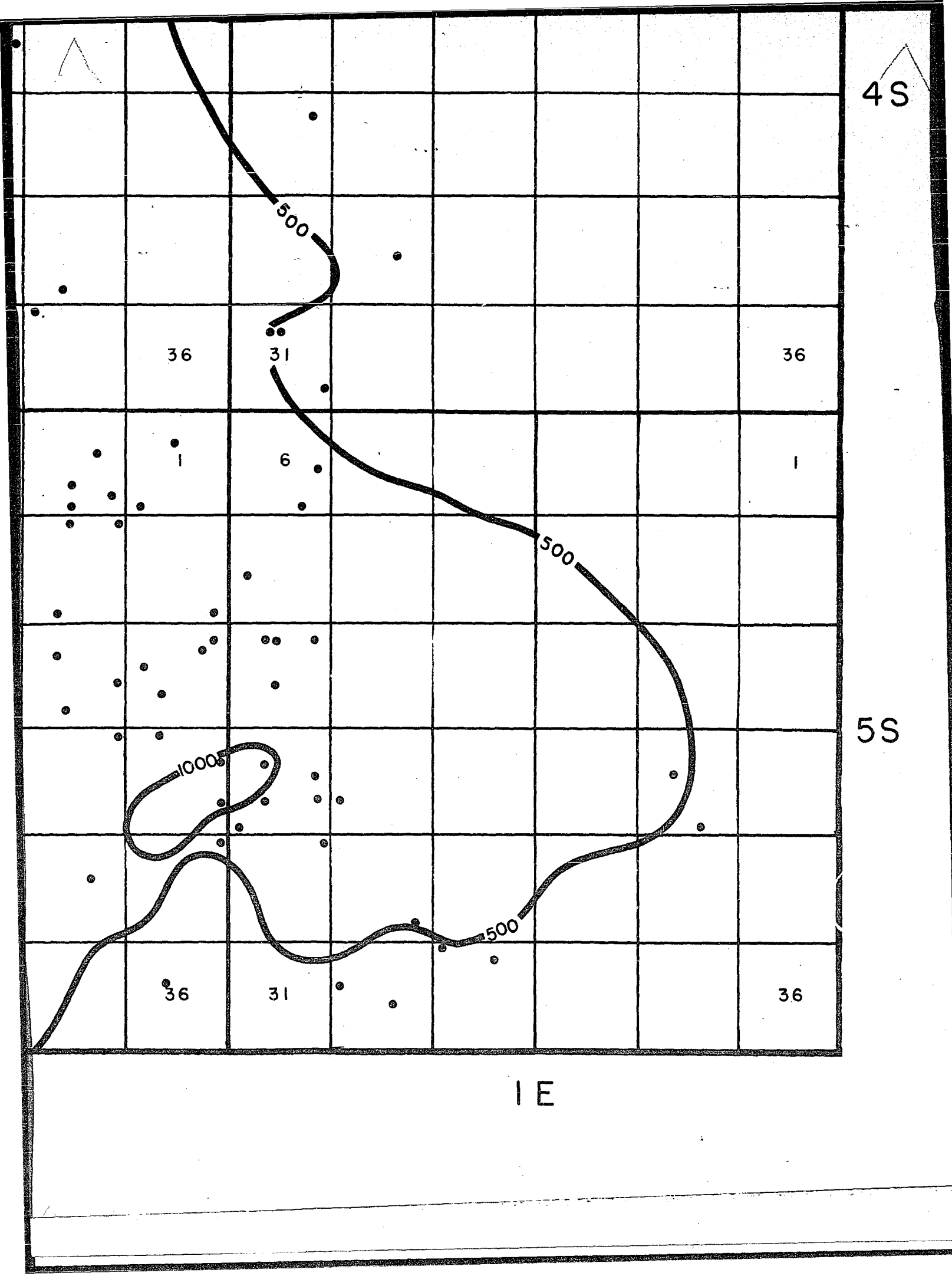
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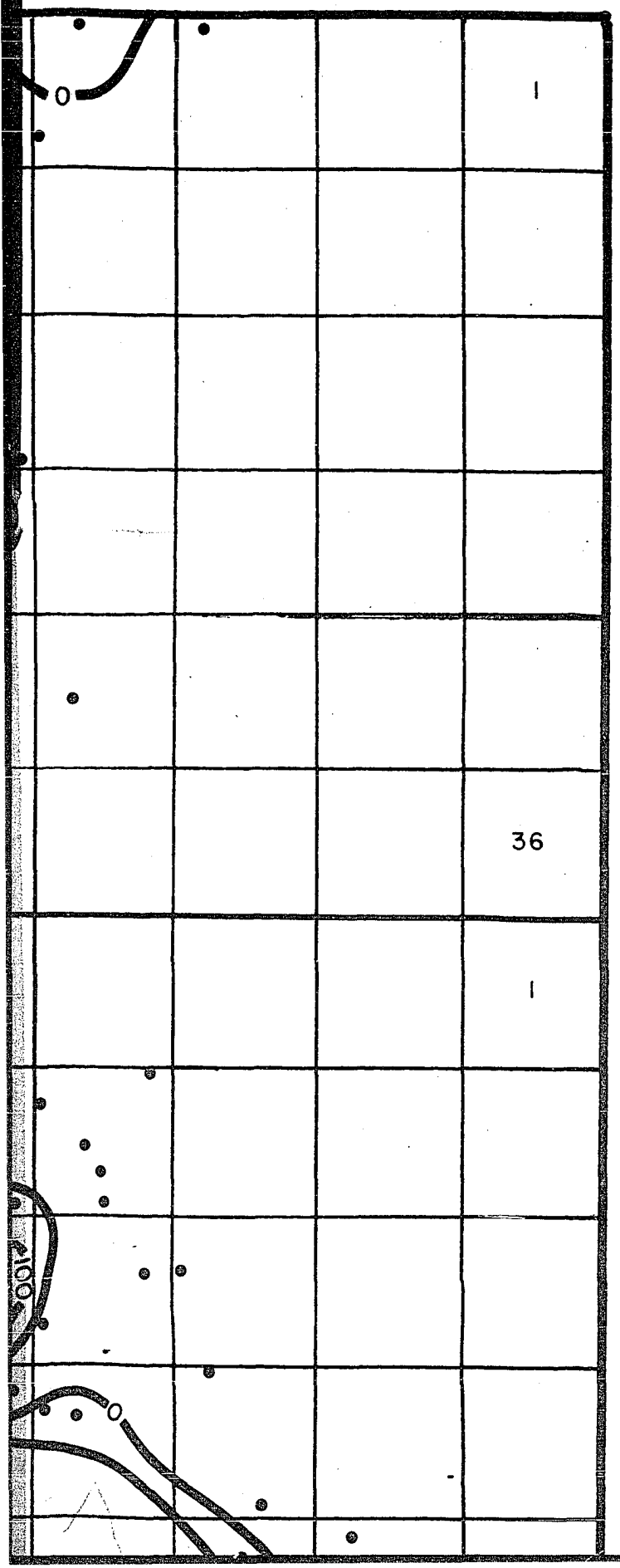

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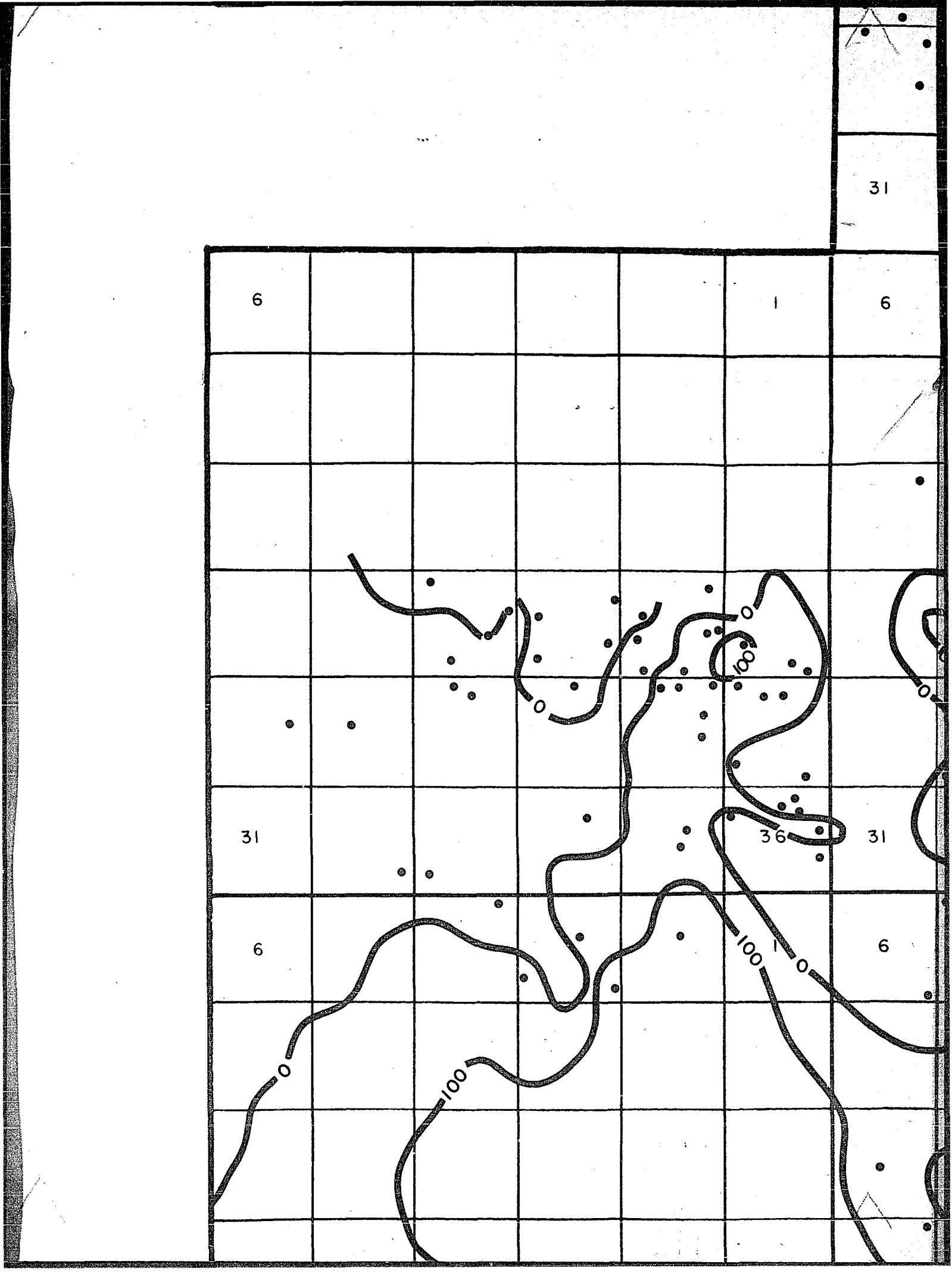
1981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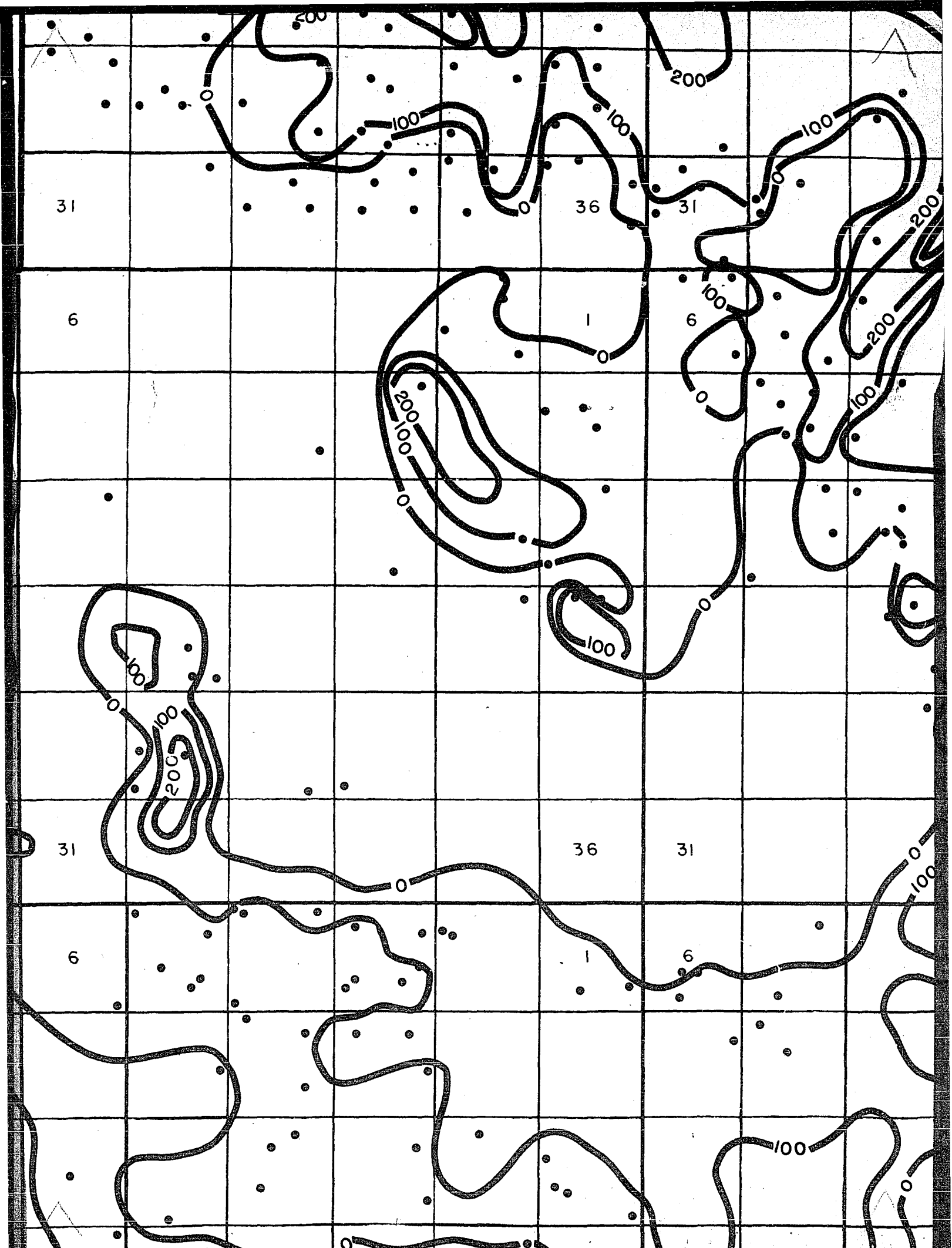
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0
100
200
31
36
31
0
100
6
1
6
100
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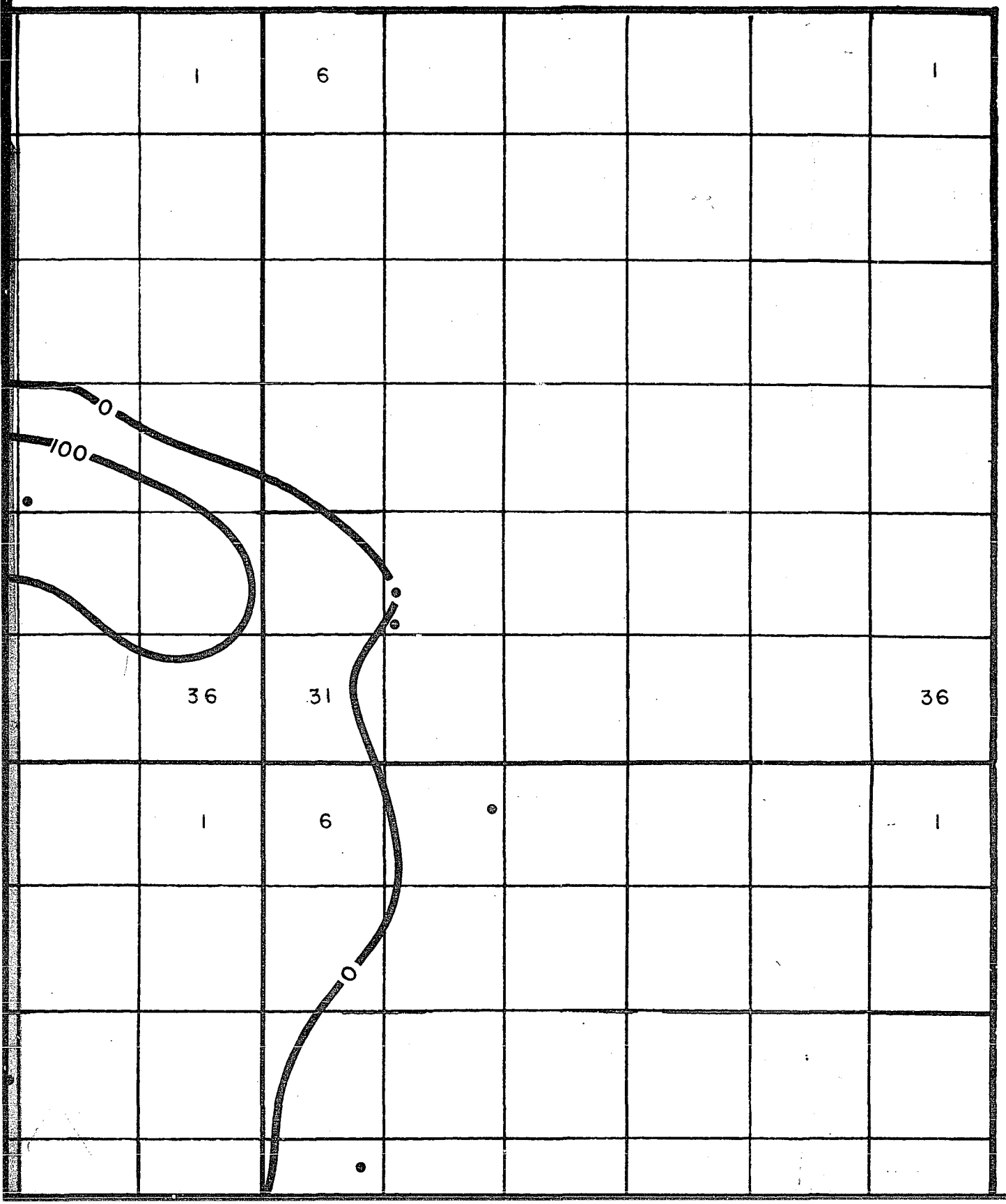
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0
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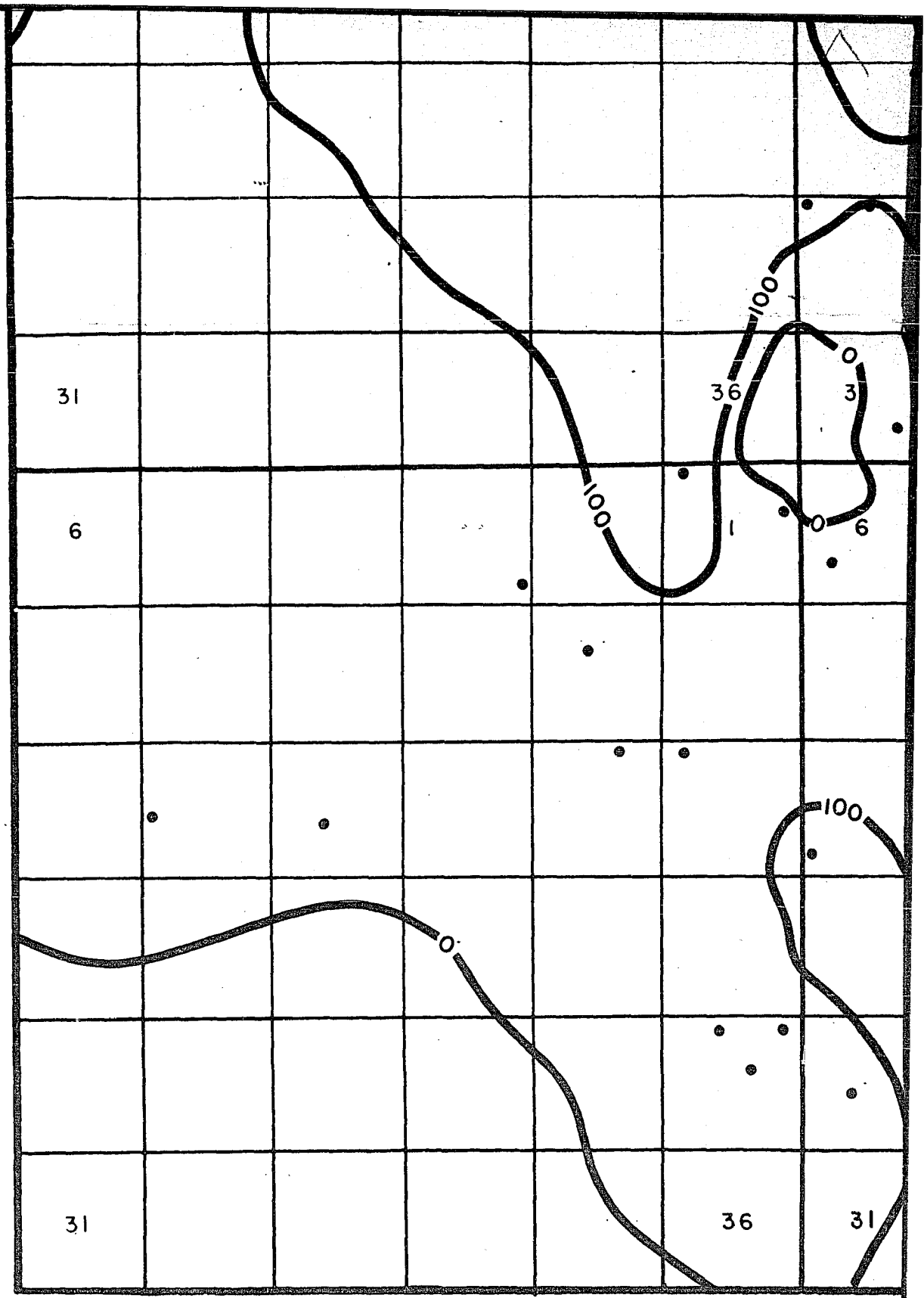

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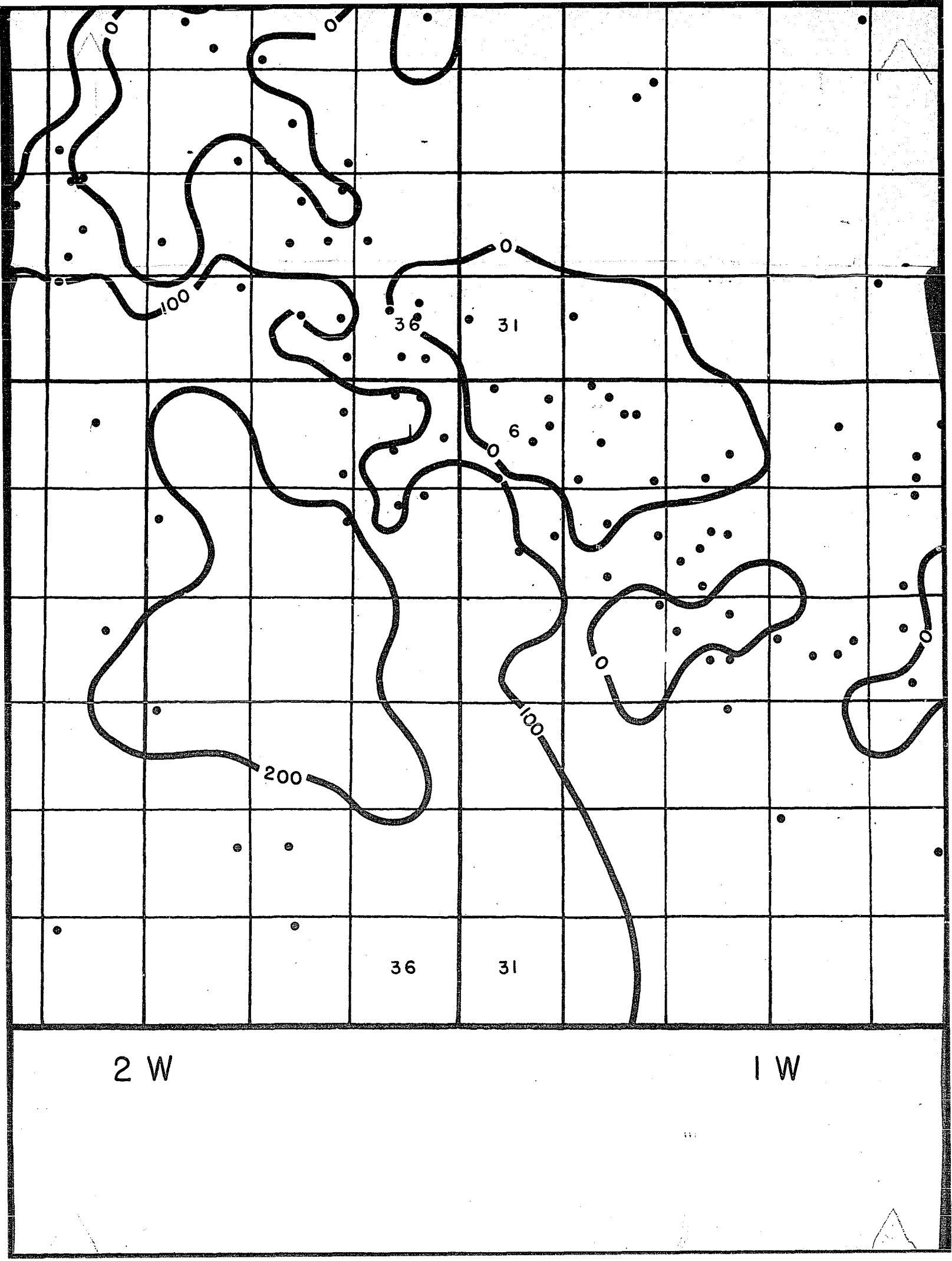
3 W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36
31
6
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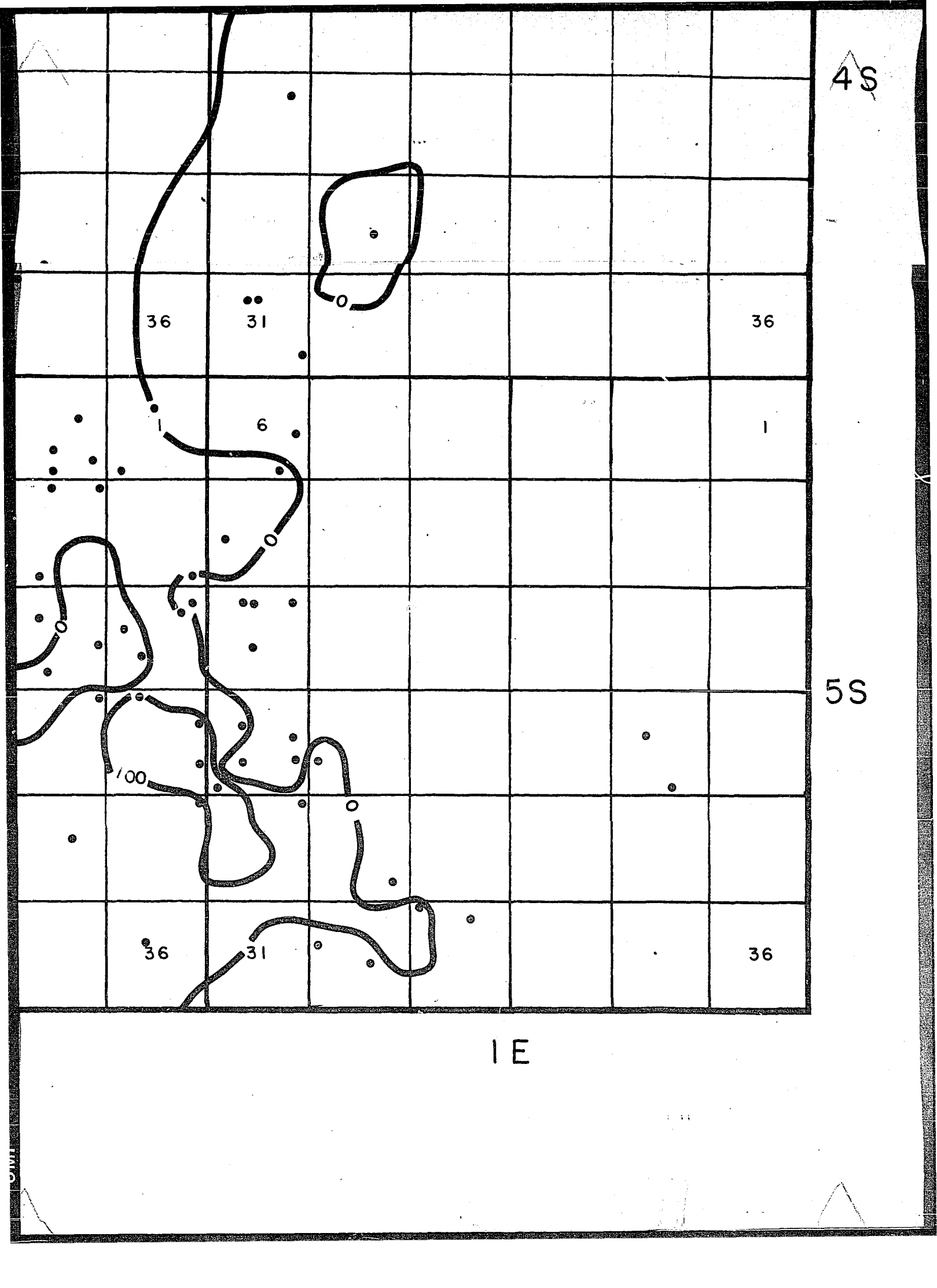
36
31
2 W
1 W


4S
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1
6
1
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0
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0
5S
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31
36
1E

6
200
400
200
300
3
100
6
200
300
200

6
200
300
200
400
300
100
200
300
400
200
100
200
300
400
300
0
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200
300
400
500
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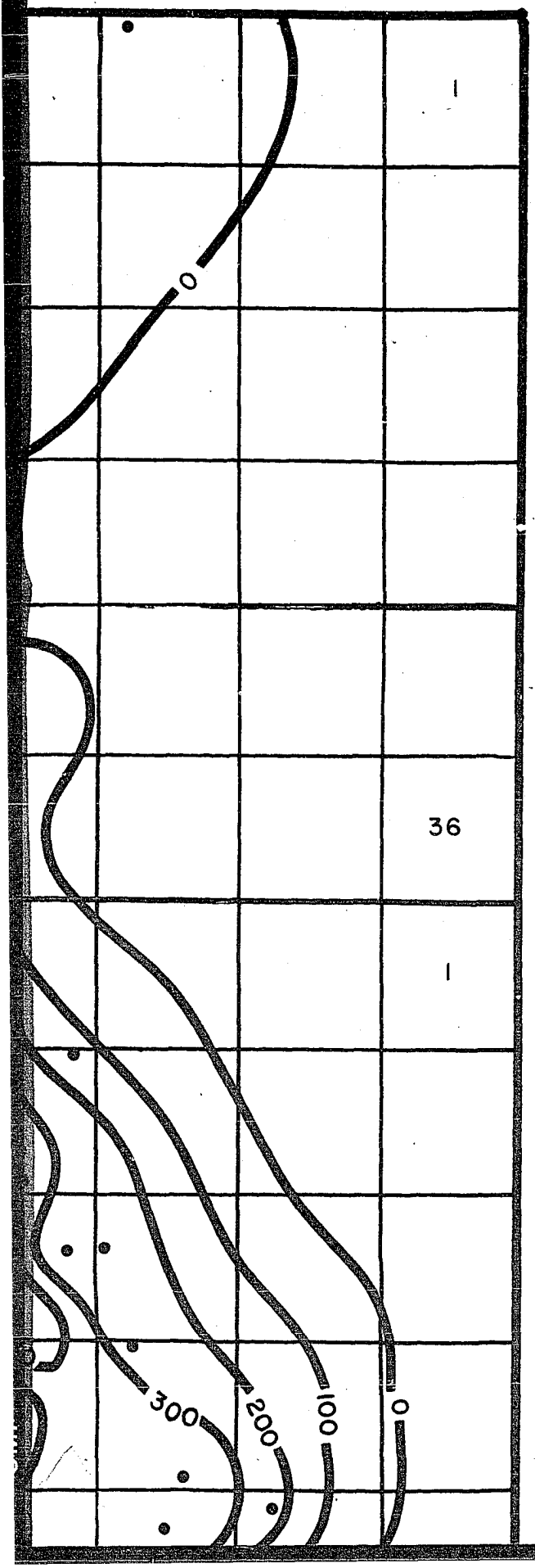

ISOPACH OF WAT
A TDS OF 100

ISOPACH INTERVAL
SCALE : 1 INCH = 1

C
19

WATER WITH
1000 TO 7000

ERVAL : 100 FEET
CH = 1 MILE

CARY L. McCONNELL
1981


31
6
1
6
2
100
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31
36
31
100
6
1
6
100


100
200
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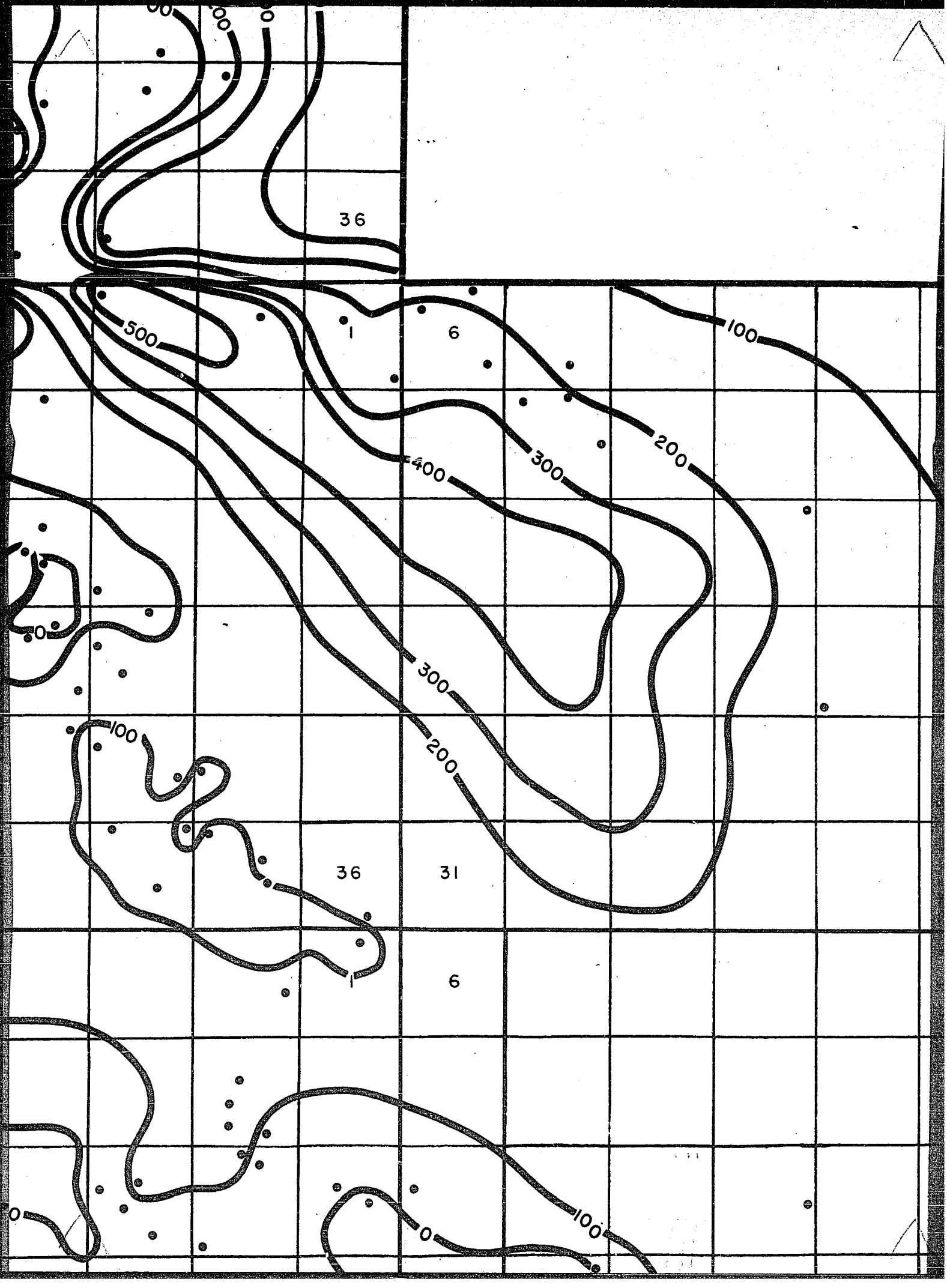
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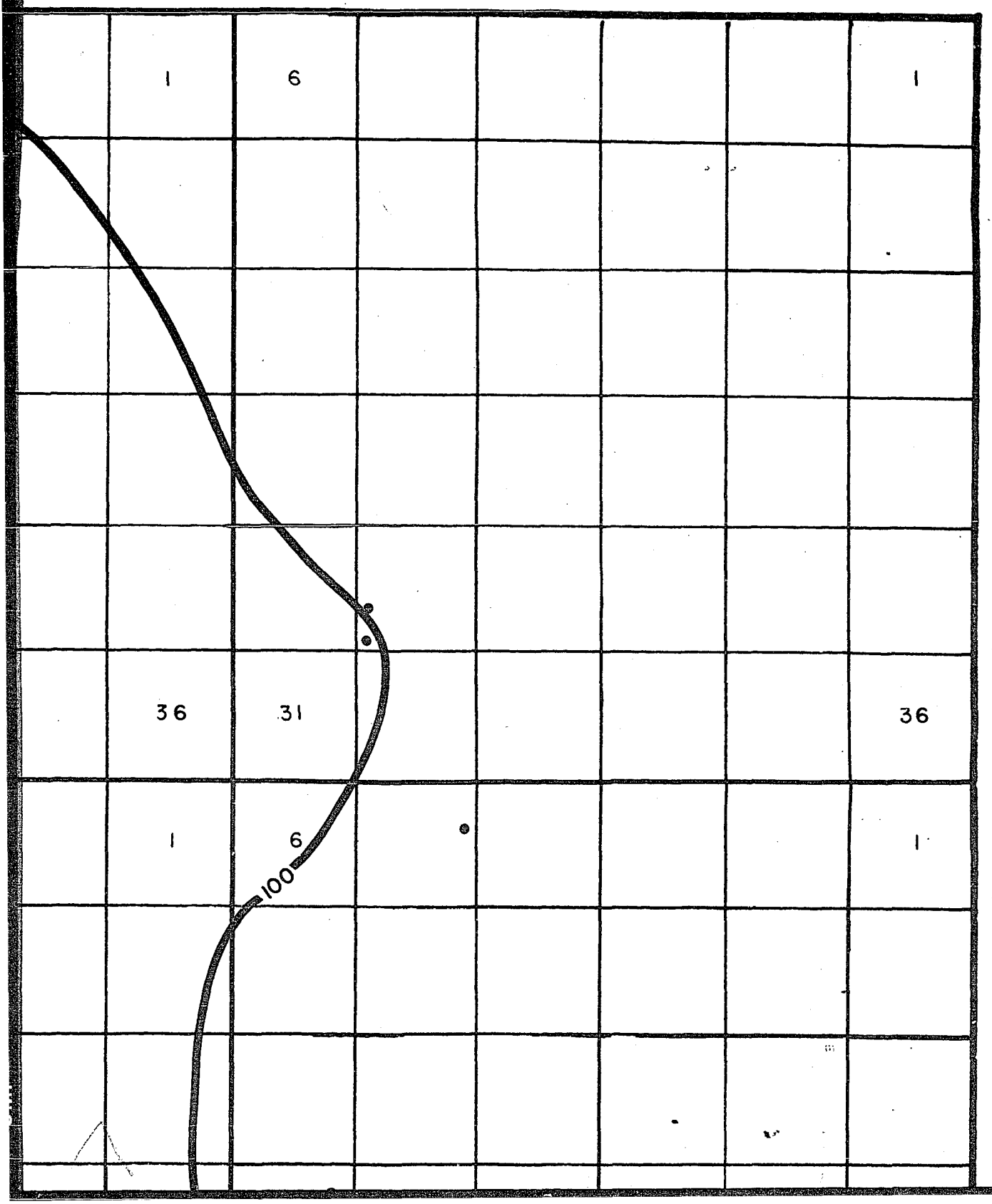
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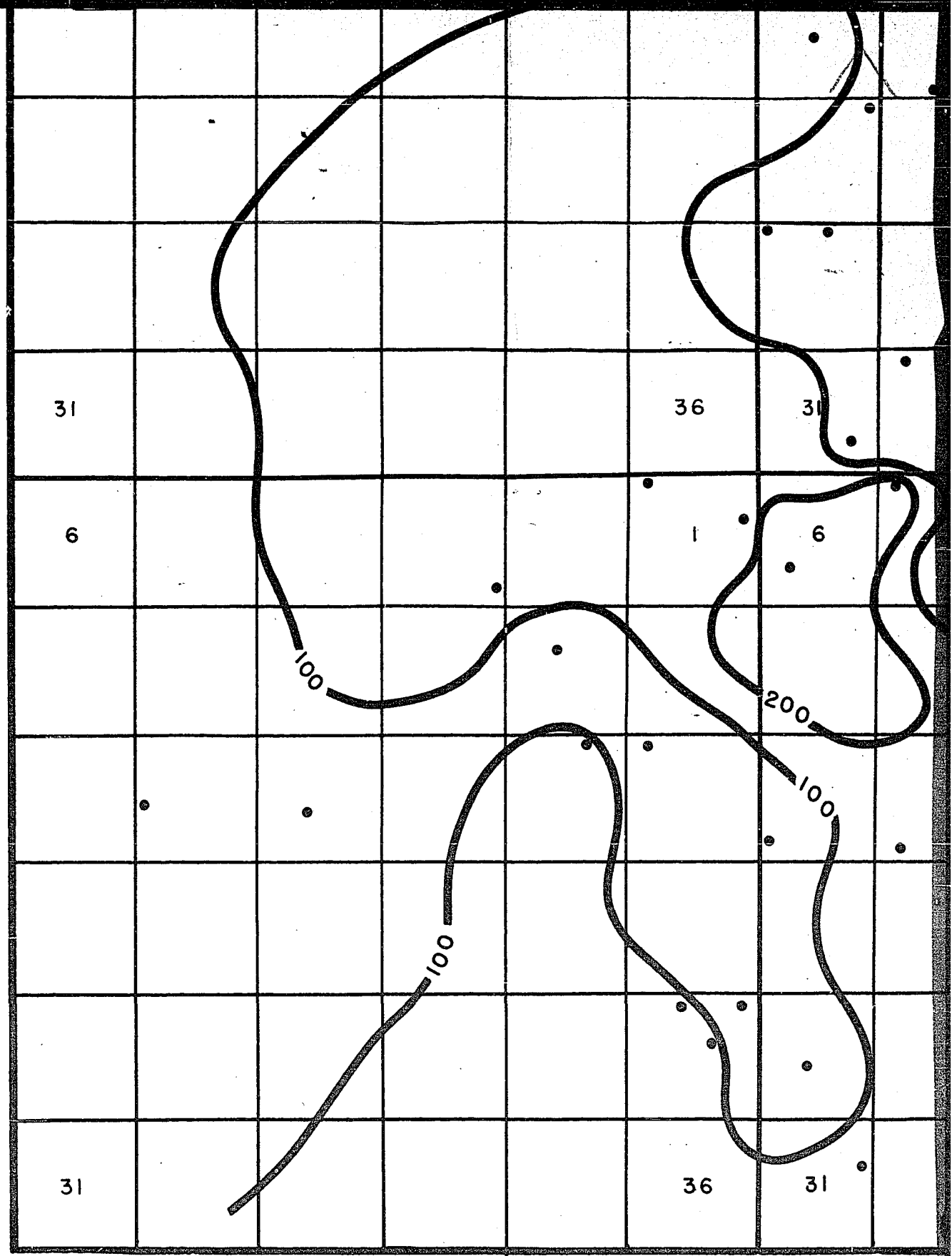

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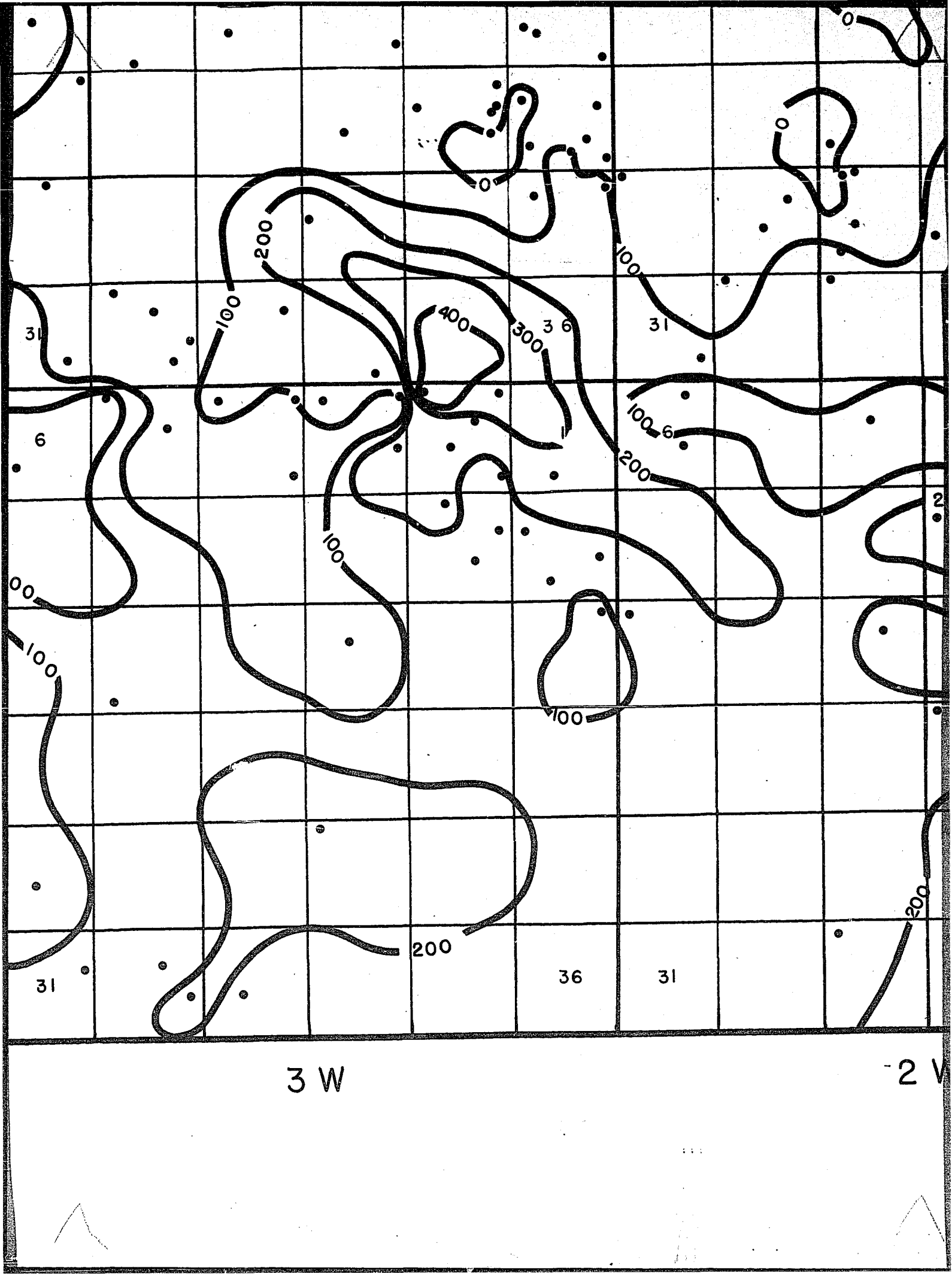
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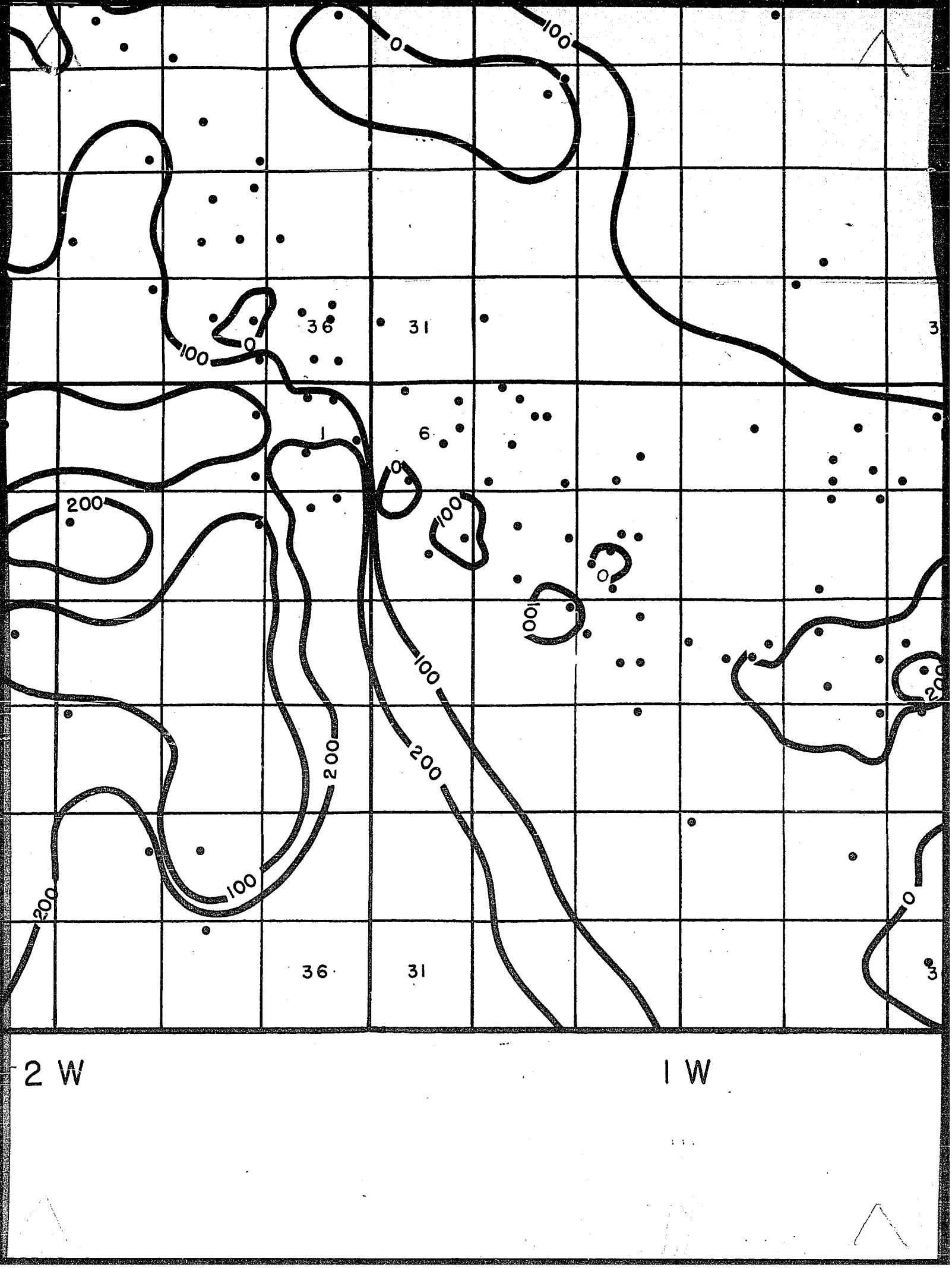
31
36
31
3 W
2 W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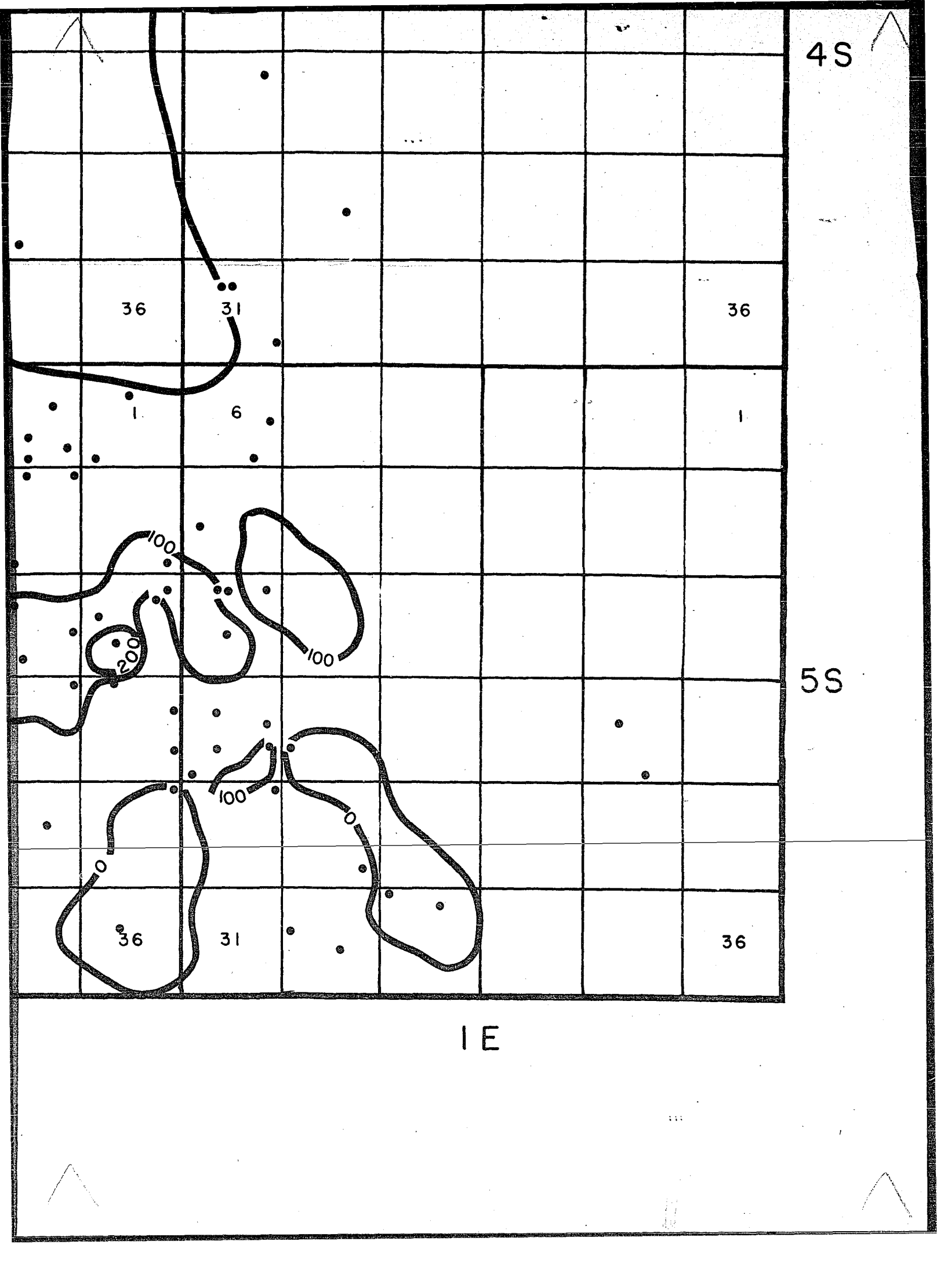
4S
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